

## DOCTORAL THESIS

**Status and culture moderate emotional and behavioural reactions to email norm violations in higher education, healthcare and international business  
a cross cultural study**

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**STATUS AND CULTURE MODERATE EMOTIONAL AND  
BEHAVIOURAL REACTIONS TO EMAIL NORM VIOLATIONS  
IN HIGHER EDUCATION, HEALTHCARE AND  
INTERNATIONAL BUSINESS:  
A CROSS CULTURAL STUDY**

by

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**A thesis submitted in partial fulfilment of the requirements  
for the degree of PhD**

**Department of Psychology  
University of Roehampton**

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### **Statement of Original Authorship**

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature:



ATIAH MOHAMMAD R. ALMALEKY

Date: 14/03/2017

## Abstract

*Background:* Communication via email plays an increasingly vital role in all work settings, particularly in those which are cross-cultural and culturally diverse, where employees with different cultural backgrounds and professional status groups must interact effectively to achieve individual and organisational goals. This is particularly important in the increasingly culturally diverse organisations within the healthcare, higher education and business sectors, which necessitate cultural intelligence and competence in effective communication, especially in the essential requirement of email communication, in which reactions to email violations in different cultures can differ. Study 1 tests a conceptual model in the higher education (HE) and healthcare (HC) sectors in the UK and the Kingdom of Saudi Arabia (KSA), with the aim of exploring whether the cultural background and work status of both email sender and receiver have any moderation and interaction effects on the receiver's cognitive attributions, emotional and behavioural reactions to email violation caused by technical errors and etiquette violation. Study 2 tests a revised conceptual model which includes the additional moderating factors of global identity, trust, extraversion and emotional stability, applied to the international business sector in the context of work status, with regard to social identity theory and appraisal theory (concerning in-group and out-group members).

*Method:* Both studies employed a 2 (cultural background: same/different) x 3 (work status: high/same/low) experimental design, Study 1 in higher education (N=443) and healthcare (N=411), and Study 2 in international business (N=744), using a cross-sectional survey questionnaire containing an email violation vignette, which included technical errors and etiquette violation. Six experimental variations of this vignette were randomised to participants, to vary the email sender's cultural background and work status.

*Study 1 Findings:* All the participants perceived email violation, with different effects recorded by those in the KSA and the UK, with the KSA participants (more collectivistic and higher power distance culture) reporting stronger negative emotional and behavioural reactions towards email violation than the UK participants. A similar culture negative bias was evident in the UK sample, increasing the effect of anger on the tendency to move against an email sender when from the same culture as the receiver, whereas the KSA participants reacted more favourably towards the same-culture sender, increasing the effect of happiness on the tendency to comply with the sender's request. When comparing country of origin and sector, there was a moderating effect of



higher status negative bias in the UK HC, with a higher-status sender increasing the effect of anger on the tendency to move against the sender, but reducing its effect on the tendency to move away from the sender, whereas the sender's status did not moderate the reactions of the KSA HC sample. In addition, it was found that the effects of anger and guilt on the move against tendency were enhanced by lower-status sender (a lower-status negative bias) and reduced by higher-status sender in the KSA HE, whereas the sender's status did not moderate the reactions of the UK HE sample, in which higher levels of anger and guilt, and lower levels of happiness, liking and positive attributions mediated the relationship between perceived violation and negative behavioural reactions.

**Study 2 Findings:** In the international business sample, it was found that high global identity, and high dispositional and organisational trust reduced the recipients' negative emotional and behavioural reactions to email violation, suggesting that these factors have a positive impact on email communication in international business. The findings from these studies therefore show that email communication is, in fact, influenced by multiple factors affecting how the sender is perceived and how the recipient reacts. Consequently, this complexity in the dynamics of email communication highlights the need to train professionals in appropriate email etiquette across all organisational sectors, focusing on the necessity to control any negative emotional and behavioural reactions towards a perceived email violation, as this could be harmful to professional inter-group relationships and outcomes.

*Keywords:* Cultural background, work status, email communication, email norm violation, experiment, social identity theory, self-categorisation, in-group, outgroup, SIDE model, appraisal theory, attributions, dispositional trust, organisational trust emotional reactions, behavioural reactions, emotional stability, extraversion, global identity, local identity.

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## **1 Introduction**

### **1.1 Background**

Email has facilitated and accelerated information exchange for the past 40 years, becoming the essential tool of online communication within and between organisations and virtual teams in all economic, governmental, academic and social sectors worldwide (Minsky & Marin, 1999; Waldvogel, 2007). This is due particularly to the significant beneficial impact that utilizing text-based electronic methods can have on tackling language issues which necessarily arise from cross-cultural communication within and between global organisations (Hertel et al., 2005; Jones et al., 2004; Moser, 2013; Schweitzer & Duxbury, 2010; Waldvogel, 2007). Originally, email replaced the need for written correspondence and face-to-face communication in many areas of work (Waldvogel, 2007), providing instant sender/receiver communication and file transfer exchange in seconds, rather than the slower methods of communication transfer, such as fax machines, telegrams, post and courier delivery services. Despite the plethora of online communication tools available, including widespread text messaging, instant messaging, social media and image-based applications (Derks & Bakker, 2010; Grudin, 2012), email remains the dominant form of computer mediated communication (CMC) in organisational life (Derks & Bakker, 2010). It has thus become the cornerstone of collaborative communication not only in business, but also in the higher education and healthcare sectors, where it has become an increasingly common communication tool (Kaltschmidt et al., 2008; Madden & Jones, 2008).

Emails offer organisations a system over which they can maintain more control than when using other forms of CMC, as an internal email system can be set up and monitored by their own information technology and online security systems. Many organisations also have email communication policies in place, which are binding on employees, and often contain standardized formal signatures, hence email can become part of the organisational brand. Moreover, organisations tend to set up internal email addresses for staff, which restricts and controls who can contact them, reducing the potential for junk email, spam, fraud and security risks. Despite the fact that Skype has many features which are superior to email, including the visual webcam, instant messaging, share screen option, and free international calls, many organisations prohibit its use by employees. Likewise, other instant messaging applications and social media, which have become associated with 'social communication' within cultural norms, such as Facebook and Twitter, are not widely used within organisational communication, whereas email has become associated with

professional life (Derks & Bakker, 2010; Grosse, 2002; Hallajian & David, 2014; Najeeb et al., 2012; Waldvogel, 2007). Email also offers the possibility of providing an important evidence trail and large storage facility for electronic messages and documents, which can result in a 'paperless' organisation, which can save and archive its online communications, via its internal IT systems.

Another important element in the high use of email communication is that internally (within organisations) it reduces the need for face-to-face meetings and the logistical costs these entail. Indeed, the lack of non-verbal cues in email use can be considered a key advantage: users can more strongly control the tone of their messages, and edit the content, projecting a more polite formal professional approach than would be expected or possible in telephone or face-to-face communication (Waldvogel, 2007), due to its potential to eliminate or lessen the signs that can cause discrimination (Amichai-Hamburger, 2008), such as visual and audio cues revealing the person's cultural background, and other factors such as work status, gender, ethnicity, current mood, and level of interest in the topic or recipient. Consequently, emails can help reduce the potential for discrimination in the workplace, reducing the potential for bias and prejudice (Amichai-Hamburger, 2008).

Reliability is another important factor, as email is delivered without the recipient's presence, and offers processing and retrieving facilities, all in a system that rarely fails its users (Derks & Bakker, 2010). While the popularity and globalization of internet smartphones is mainly associated with instant messaging and social media, it has in fact also increased email functionality, with all smartphones having email applications to send and receive messages and attachments. Furthermore, most professionals are familiar with the procedures involved in email communication, unlike other forms of CMC, which may not be so easy to use (Bishop, 2009; Grosse, 2002; McGoldrick, 2011).

Another distinct advantage of email communication is that email is an efficient medium for transmitting comprehensive (i.e. complete) information (Huang, Watson & Wei, 1998). Letters, faxes and cell phones can also fulfil this function to some extent, but none rival the efficiency of email in this regard (McGoldrick, 2011), obviating the costs of paper and printing within an instant communication context. Furthermore, emails can be read, actioned, saved or deleted at user convenience.

Overall, the advantages of email are its formality, limited social cues reducing attribution formation and discrimination, controllability, familiarity, convenience, ease of use, time-saving benefits, reliability, security, cost-effectiveness, editing facilities, and storage capacity; these factors explaining its ubiquitous use within organisations and across cultures. In the past, email has ensured good services for customers and facilitated inter- and intra-organisational cooperation (Minsky & Marin, 1999).

However, despite its numerous advantages, email has increasingly become associated with some significant shortcomings that can hinder computer-mediated collaboration amongst distributed teams, especially in terms of its potential social and cultural constraints (Cho & Lee, 2008). Perhaps the most obvious of these is the increasingly overwhelming volume of emails that people receive on a daily basis, which has contributed greatly to work stress, with prompt responses often expected, resulting in the accrual of long-email threads (Barley et al., 2011; Brown et al., 2014; Jerejian et al., 2013; Reinke & Premuzic, 2014).

Another problematic issue is that of language accuracy and appropriateness within email communication. Despite the availability of spellchecking facilities, poor spelling and grammar in emails, which may be caused by issues such as dyslexia, non-native language or simply a lack of attention, may produce unintended technical errors and/or email etiquette violations, which may negatively impact how the recipient is perceived and responded to, or even ignored (Vignovic & Thompson, 2010). Furthermore, increasingly sophisticated spellcheckers themselves can be restrictive for email correspondence seeking to use particular non-lexicon terms (e.g. the use of Latin or French phrases in English language emails, or emphatic features that people associate with other electronic communication formats).

Further negative contributing factors within organisations could be a lack of formal email communication training, and simply a failure to check whether employees are both familiar with and confident in using emails with adequate writing skills. Indeed, a 2003 survey by Information Mapping Inc. indicates that 34% of the participants in the US reported that they waste between 30 to 60 minutes a day on reading poorly written email messages (Stibbe, 2004).

The relatively impersonal nature of emails, while offering some intrinsic benefits (as mentioned previously), may also serve to exacerbate problems of misunderstandings between senders and recipients due to the remoteness of communication, with a lack of personal communicative features

such as body language etc.; this can be mitigated in other forms of CMC by the use of substitutes such as emoticons, which improve mutual understanding and familiarity, but which are considered inappropriate in formal email communication. Thus, due to the absence of paralinguistic features and personal and social cues, such as verbal infections, gestures and facial language, which may be conducive to effective interaction (Vignovic & Thompson, 2010; Waldvogel, 2007), email senders and receivers have to rely on every single word written to ensure effective communication (Chen, 2006), reducing this communication to the impersonal conveyance of informational messages. The email limitations in transmitting social and demographic information may thus inevitably create misunderstandings, with practical relevance for instance in communication between collaborating teams within organisations, an issue which requires extensive research (Cramton, Orvis & Wilson, 2007).

Such challenges in email communication, especially in globalized organisations, can result in email communication violations, which for the purposes of this research can be defined as deviations from standard (normative) communication practices, procedures, or rules that a culture and/or organisation prescribe. These violations may be deliberate or unintentional, and can include accidental (e.g. if writing in non-native language/low cultural competence), unintended (e.g. inappropriate over-/under-formality of language use), or may stem from situational constraints (e.g. when a sender is under time pressure and omits the 'niceties') (Vignovic & Thompson, 2010). As norms determine certain socially appropriate behaviours in certain communication contexts (Berkos et al., 2001), behaviours that violate norms can clearly be negatively evaluated, and thus be detrimental for effective email communication.

Levine et al. (2000) propose that norm violations occur when people behave in an unacceptable manner or in a way that is unsuitable to the communication context. When violation of email communication norms occurs, studies suggest that this reduces the recipient's perception of the sender's competence, conscientiousness, agreeableness, affective and cognitive trustworthiness, friendliness and likeability (Jessmer & Anderson, 2001; Vignovic & Thompson, 2010), and that these negative perceptions can damage professional relationships, resulting in misunderstanding, negative emotional reactions and behavioural reactions, such as confronting or ignoring the sender (Mackie, Devos & Smith, 2000). Alternatively, some recipients may comply with or respond to the sender's request, regardless of the email violation, due to certain individual/social factors in the recipient. It is also possible that these three different behavioural reactions (compliance, move

against, move away) to an email violation might be mediated by the recipient's attributions of the sender, and the recipient's emotional reactions, and/or might be moderated by any social information that is provided about the email sender in the email, as well as the recipients' own work status/cultural background and individual characteristics. Moreover, these complex reactions to email violation may differ according to professional sector, group identity, and divergent cultural dimensions such as high/low power distance or high/low collectivism.

## **1.2 Aim of the Research**

This research examines the moderating effects of eight factors (i.e. cultural background, work status, global identity, local identity, dispositional trust, organisational trust, extraversion and emotional stability) on affective and behavioural reactions towards perceived email norms violation, and how these effects vary among different professional fields (higher education, healthcare and international business), and between different countries (the UK and the Kingdom of Saudi Arabia, KSA). The current research also examined the mediating role of attributions and affective responses of email receivers on their behavioural reactions towards an email violation.

## **1.3 Rationale for Assessing Moderation and Mediation Effects on Reactions to Email Violation**

Studying affective and behavioural reactions is important for helping people to promote effective communication using email, as negative reactions to a perceived email violation, of which a sender may be unaware, have the potential to result in no response, or an aggressive response, rather than the required response (i.e. compliance with the email request). It is therefore essential to understand the dynamics involved in how people perceive and respond to an email violation, given that email remains the dominant form of electronic professional communication, including higher education, healthcare and business.

The process that occurs in response to an email violation is triggered when the email recipient perceives a violation of communication norms and reacts negatively, first with emotion (e.g. anger, sadness, worry, guilt), which influences their behavioural responses such as moving against (e.g. confronting the email sender) or moving away from (e.g. ignoring the email sender, not sending the reply that they may need). Non-compliance with the email sender's request may hinder or terminate professional relationships, communication and collaboration between individuals, teams and organisations domestically or internationally. It is important to gain an understanding of the impact

of email violation, the extent to which it is tolerated in the current digital age, how it influences behavioural reactions, and how much these reactions are influenced by the emotional reactions of recipients towards the violation.

While concern for email norm violation and associated negative affective and behavioural reactions at the individual professional level is clear, we do not have an in-depth understanding of how different social and cultural factors and individual factors of the sender/receiver relationship influence recipients' affective and behavioural reactions to perceived norm violation, such as how different socio-demographic factors of sender/receiver (e.g. status, cultural background) and individual factors (e.g. personality traits, dispositional/organisational trust, and global identity) influence people's behavioural reactions to perceived email norm violation, as this area is under-researched. In addition, these effects cannot be assumed to be universal, but may differ particularly across professional groups (e.g. doctor/nurse, lecturer/student, manager/employee), and between countries, as explored in this study with regard to the UK and KSA.

Factors such as an email sender's cultural background and status and email recipient's characteristics are important to investigate because their negative affective and behavioural reactions to email violation may be modified (increased or decreased) by the social information provided about the email sender (e.g. their work status and cultural background), as well as the recipients' status/culture and individual characteristics (e.g. personality traits, trust, global identity). Including all of these moderating and mediating factors in this study highlights how complex email communication really is, from a social psychological perspective, as email users ordinarily tend to view email primarily as a simple, user-friendly form of electronic communication, with no idea of the impact of all of these factors on its perception and effectiveness. This has also been overlooked by psychologists.

The importance of studying all of these contributing factors is to also improve collaborative email exchange between professionals and across countries, through first identifying which factors influence perceived email norm violations within cultures and across cultures, and within and between professional groups. From this, we can develop and evaluate training interventions to improve understanding of how people react to email content and social information provided about the sender, and teach email etiquette to professionals in universities, healthcare organisations and international business, particularly multidisciplinary organisations, so that individuals are less likely to make email violations, and are also trained to react less negatively to perceived email violation



from an in-group or out-group member (e.g. moving away/ignoring, or moving against/confronting the sender), harming relations.

#### **1.4 Scope of the Research**

The current research investigates the consequences of email violation across multiple professional sectors (higher education, healthcare and global business), and between the UK and Saudi Arabia. The dependent variable is behavioural reactions towards the email violation, which has three levels (compliance, move away, or move against) derived from the study of Stephens et al (2009) and Mackie's et al. (2000) intergroup emotion theory (see definitions in Appendix A). The independent variable is the email vignette, which includes a deliberate email violation of both content and etiquette (i.e. use of informal language, casual tone and spelling errors). The moderator variable is the variations of the email showing different social information about the sender's status and culture (i.e. three status parameters: higher/lower/same x 2 culture: same/different, experimental emails). The first mediating variable is affective responses with six levels (happiness, sadness, worry, anger, guilt and liking). The second mediating variable is internal attributions (positive). These are the variables included in the research model developed for Study 1 (higher education and healthcare samples). In Study 2, additional moderator variables were included in the research model, which were more relevant to the global business sample. These moderators were global identity, local identity, organisational trust, dispositional trust; and personality traits of extraversion and emotional stability. The first cross-cultural studies (comprising Study 1) were conducted independently and concurrently in the UK and in KSA), in two different multi-disciplinary public sector organisations including higher education (Study 1a) and healthcare (Study 1b). Study 2 was conducted in the private sector in three international business companies, based in Saudi Arabia.

A moderator variable is defined as:

“a qualitative (e.g. sex, race, class) or quantitative (e.g. level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable. Specifically within a correlational analysis framework, a moderator is a third variable that affects the zero-order correlation between two other variables” (Baron & Kenny, 1986, p. 1174).

In addition, the mediator variable is “a mediator to the extent that it accounts for the relation between the predictor and the criterion” (Baron & Kenny, 1986, p. 1176).

## **1.5 Rationale for Study 1**

### **1.5.1 Need to extend previous research**

Previous research has indicated that violating email communication norms negatively influences email recipients' perceptions and attributions towards the email sender, and that these outcomes are moderated by the sender's culture (Vignovic & Thompson, 2010) and work status (McGoldrick, 2011). However, these findings are limited to university samples in the UK and USA, and are incomplete, as they overlooked many additional factors that might influence reactions to an email violation, which Study 1 addresses. The current research is justified as it extends these two recent studies on email communication, an area which is very under-researched, yet which is very important for effective communication in organisational life.

### **1.5.2 Need to test interaction effects of sender's culture and status**

Vignovic and Thompson (2010) investigated the effect of sender's culture (same or foreign as email recipient) on the recipient's perceptions of email norms violation; McGoldrick (2011) then investigated the effect of the email sender's work status on the recipient's emotional and behavioural reactions to email norms violation. Both studies were incomplete, as they did not test the interaction of the email sender's cultural background and work status, which are both likely to interact and influence how the recipient responds to the violation. Study 1 therefore investigated the interaction of both culture and work status of the email sender to understand how they mutually influence recipients' reactions.

### **1.5.3 Need for a broader, multi-sector professional sample**

#### *1.5.3.1 Justification for a higher education sample*

Study 1 extends the scope of these two previous studies (McGoldrick, 2011; Vignovic and Thompson, 2010) by including a larger sample from two different organisational sectors (i.e. higher education and healthcare), as research findings from university-based samples have limited generalizability to other sectors, and are not very representative of the larger population. The higher education sample includes both lecturers and students from one university in UK (Roehampton University) and one university in Saudi Arabia (King Abdul-Aziz University). The rationale for selecting this sector and sub-groups is that the author works in the higher education sector in Saudi Arabia, and conducted a PhD in the UK, therefore providing easy access to this sector and subgroups. The lecturer/student sub-groups were chosen to represent the higher and

lower status groups, respectively, because they have clear status differences. Notably, students are from a non-professional sector.

Previous studies have found that students tend to send more informal email communication than lecturers would desire, thus the student group may be more likely to commit email violations in higher education, which justifies their inclusion in the Study 1. Email has enabled university students to contact lecturers outside their traditional office time and space (Duran, Kelly & Keaton, 2005; Haworth, 1999), and it offers a means of communication to students and lecturers where they can exchange information that would be lost in a classical classroom setting (Hassani, 2006). Students may use email to avoid coming to campus or face to-face communications with instructors (Waldeck, Kearney & Plax, 2001), to make an appointment, make excuses for work delay or absences or to ask questions related to class material (Duran et al., 2005). Email is also gradually becoming a major tool for students making personal and social relationships and submitting their homework (Motalebzadeh, Mohsenzadeh & Sobhani, 2014; Samar, Navidinia & Mehrani, 2010). However, lecturers realise the need to improve email communication between students and themselves (Foral et al., 2010), considering that email etiquette and professionalism are lacking amongst their students (Foral et al., 2010). Motalebzadeh, Mohsenzadeh and Sobhani (2014) concluded that the email was important to both instructors and students, and established that improving the former's skill to manage the medium would be of benefit to the latter.

In higher education, lecturers and students increasingly communicate more via email, as face-to-face encounters are restricted, mainly due to the busy lifestyles of both parties. Email communication takes place between people spread over large campuses and the lecturers and students are, for much of the time, unable or unwilling to be contacted by telephone or in person, being as they are engaged in attending lectures, conducting classes or moving around. The use of email means that students with queries or needing help with assignments can send their questions to their lecturer at any time of day, to be answered whenever convenient by the lecturer recipient. Poor email communication (e.g. containing perceived violations and limited social information about the sender) delivered between students and lecturers may negatively influence the perception and the reactions of each higher education group towards the email sender, which may result in negative reactions, defeating the purpose of the email and reducing the potential for knowledge sharing and relationship building between lecturer and student groups. Stephens, Houser and Cowan (2009) found that instructors viewed students who sent casual email messages as less

likeable and credible, making it more unlikely for them to comply with their appeals. McGoldrick (2011) also found that a student group and a lecturer group perceived more mutual email violation, and had more negative affective responses to casual email sent by one group to another. Out-group bias exists and such bias caused students and lecturers to move against each other as out-groups.

#### *1.5.3.2 Justification for a healthcare sample*

Doctor-nurse communications are critical for patient safety and workflow effectiveness (Cusack & Parry, 2014). However, studies suggest the problem of ineffective nurse-physician communication is both common and complex, and has implications for patient safety and organizational culture, including a healthy workplace environment (Manojlovich, 2010; Schmidt, 2012). Studies suggest that physicians are progressively using email communication more commonly as a part of their workday, and 93% of them have internet access at their workplace or at home, with at least 64% communicating via email with colleagues, team members and patients (Harris Interactive, 2002). Westbrook et al. (2010) argued that clinicians must have reliable, secure communication tools to communicate effectively. Email and text messages facilitate asynchronous communication (when individuals are not present at the same time) between doctors and nurses. A major practical advantage of email communication between health professionals is that it may reduce interruptions, which have been shown to increase medical errors (Westbrook et al., 2010).

A variety of mobile and land-based communication systems have been experimented with and used (Cusack & Parry, 2014). Cusack and Parry (2014) observed 22 doctors and 170 nurses over one month and found that pager was the most common communication technology used by participants at baseline, but after one month both groups reported marked improvements in doctor/nurse communication following the introduction of improved broadband and android mobile phone technology, which facilitated greater email and text message communication between doctors and nurses. Specifically, smart phone capabilities, including email, enhanced their efficiency, effectiveness and patient safety for a 'time-challenged workforce'. Nurses were able to provide more information to describe how ill patients were, and doctors could better prioritise their time, and respond to urgent tasks with immediate action. Hence, email communication facilitated through smartphone technology had beneficial work impacts on both groups.

Previous studies proposed that effective doctor–nurse collaboration is positively associated with the quality of healthcare including low death rates in units of critical care (Baggs et al., 1999; Knaus

et al., 1986). Research on patient safety and effective healthcare indicates there is an increasing interdependence between doctors and nurses in the workplace (Garling, 2008). Moreover, effective communication between doctors and nurses facilitates medical quality, patients' safety, doctors' well-being and community satisfaction (Iedema, 2009 cited in Curtis et al., 2011). Furthermore, Iedema (2009) also argues that the very existence of healthcare is predicated on communication. When doctors and nurses do not communicate successfully, patient safety is at risk due to dearth or misunderstanding of information (O'Daniel & Rosenstein, 2008). Moreover, ineffective communication between doctors and nurses caused care delay, lengthening hospitalisation and increasing the risk of patient injury and death (Hailu, Kassahun & Kerie, 2016). To achieve effective collaboration, it is crucial that doctors and nurses are able to exchange information quickly and clearly. Incorrectly communicated and misinterpreted information increases tension amongst healthcare professionals as well as reducing quality of care (Shannon & Myers, 2012).

Ineffective communication between nurses and physicians may be influenced by healthcare professionals' professional status and personal traits. Morinagaa et al. (2008) found that some physician traits (specifically moodiness and short temper) are extensively acknowledged as communication obstacles by Japanese nurses. Moreover, doctor-nurse relationships are historically observed to be hierarchical, with nurses' status being subordinate to that of doctors (Morinagaa et al., 2008). Therefore, there is a need for researching the potential impact of email communication violations between these two groups, which may reduce patient safety and negatively affect organizational work climate in public hospitals. In healthcare there is frequent need to contact patients, colleagues and professionals from affiliated clinics, and often time is of the essence; the email format lends itself readily to these demands. Telephone conversations or personal visits are often necessary (particularly the latter), but there are cases in which emailing suffices and is more expedient for improved health service delivery. Another benefit is the discreet nature of email communication: no personal information needs to be spoken aloud, while a record of the conversation is automatically stored and is available at any time for a second-reading to ascertain doubtful points (i.e. for clinical or legal purposes).

Therefore, the author decided to include a healthcare sample of doctors and nurses from one public hospital in London, UK one public hospital in Jeddah, KSA to test the research model in Study 1 and extend the findings to a different organisational public hospital setting, enabling cross-sector comparison. This sample included doctors and nurses from both the UK (one public hospital

in London) and KSA (one public hospital in Jeddah), to further test interaction effects of culture/status of email sender, with doctors and nurses representing higher status and lower status work groups, respectively. The justification for including a healthcare sector is because email is now widely used within public hospitals between doctors and nurses, and staff tend to be multi-cultural in both UK and KSA hospitals, and where there are recognised status differences between doctors (higher status) and nurses (lower status) – although this differential is much less egregious in the UK.

In both the education and healthcare sectors, a range of people seek clarity of communication from people with whom they are regularly engaged in lectures, medical practice or attending meetings or conferences. Healthcare and academic institutions are probably the most obviously in need of quick, efficient, clear communication that is accessible at irregular hours and from remote locations. As such these two sectors (i.e. higher education and healthcare) offer an environment where e-communication takes place between groups of various statuses, and such variance can help to obtain better results as part of the research for this thesis.

#### **1.5.4 Need to investigate different countries and cross-cultural effects**

Although the importance of the email within communication is well established in Western, developed countries, research within this field is relatively new in the Middle East and North Africa (MENA), where the email is still in its infancy as a tool for communication. Indeed, despite English being the preferred language for international communication, previous studies on emails have not clearly stated how individuals with different cultural backgrounds make use of email norms when communicating via email, and most of previous research in email communication has been conducted in Western countries, with a dearth of research in other regions. Clearly, given manifest cultural differences, Western findings cannot be assumed to be generalizable for other cultural regions, including Asian, African and MENA contexts. In addition, the effects of the concepts of collectivism, power distance and work status as culturally formed concepts may be significant factors in determining the quality of language and reactions to norm violations, but these have not yet been sufficiently investigated with regard to email communication.

Previous related studies were mainly conducted in the UK and USA, indicating a Western bias. To overcome this, the Study 1 has tested the interaction model in two countries, UK and Saudi Arabia. All aspects of Study 1 are the same in both countries (in terms of variables measured and professional sectors). Testing cross-cultural effects is important, as the cultural dimensions of

countries, specifically collectivism/individualism and high/low power distance, are likely to influence how people react towards an email violation, and the moderating role of status and culture may differ, depending on the cultural dimensions of the recipient's cultural background. Testing the model in two countries/cultures is justified, as it will increase the validity of the results, enable cross-cultural comparisons, and is important from a practical perspective, as communicating with people from different cultures in all organisational sectors has become the norm, and increases the risk of an email violation taking place (e.g. due to language technical errors, and or communication etiquette violations).

### **1.5.5 United Kingdom and Kingdom of Saudi Arabia**

#### *1.5.5.1 Increasing collaboration*

In Study 1, two countries (UK and KSA) were selected for data collection. The author is a Saudi national, completing doctoral research funded by the Saudi government, thus this project is required to complete research including a Saudi population. As the author was studying in the UK, it was convenient to select the UK as the comparison country, particularly as the UK also has extensive collaborations with Saudi Arabia (Wagemakers, 2012). In 2011, the UK Department of Health and the Saudi Ministry of Health signed a Memorandum of Understanding (MoU) to support the Saudi government's ambitious \$100 billion investment in health programmes, drawing on UK NHS and private sector expertise. Similar collaborations or partnerships, especially in the technology sector, have since been agreed upon. A case in point is the signing of MoU between Science and Technology Facilities Council (STFC) and King Abdulaziz City for Science and Technology (KACST) which included the establishment of a range of sophisticated technological projects (British Embassy Riyadh, 2013; Science and Technology Facilities Council, 2011).

Two elements of the debate on development of higher education in Saudi Arabia relevant to this research are the official efforts aimed at addressing the inadequacy of distance learning education in the entire Gulf Cooperation Council (GCC) region and the move to internationalisation of higher education (Smith & Abouammoh, 2013). Both aspects underscore the increasing use of international collaboration and sophisticated computer mediated technologies. On distance learning, the adopted action plan resulted in the establishment of Bahrain's first Asian e-University, UAE Open University, amongst others (House of Commons, 2013). On internationalisation, KAUST perhaps illustrates the haste and scale of the Saudi government intention to speed up advancement of higher education through collaboration with international universities of high

repute. The resultant partnership with Stanford, Berkeley and Cambridge universities (worth \$500 million) and the separate plans for an education zone within the ambitious King Abdulla Economic City (KAEC) agreement with Georgia Institute of Technology in 2010 indicate the importance of collaborations in the educational sector within Saudi Arabia (Smith & Abouammoh, 2013). Gillies (2011) noted the increasingly high commitment to collaboration between the UK and Saudi Arabia following 9/11, as the Saudi Minister for Higher Education emphasised, due to Saudi nationals (including students) facing increasing discrimination, harassment and prejudice in the US, making the UK with its relatively more diverse and tolerant society a preferred choice for overseas education. There are over 20,000 students from KSA in the UK, with over 16,000 on special scholarship programmes (Gillies, 2011).

The increasing collaboration between KSA and the UK, along with the UK's increasing use of e-communication and the KSA's increasing emphasis on status and social identity and the use of e-communication as a point of interaction between opposing groups, makes these two countries highly germane to the study of emotional and behavioural reactions to norm violations in electronic communications. The collaboration between UK and Saudi Arabia in the healthcare and higher education sectors will thus require a robust mutual cultural awareness, especially amongst team collaborators.

#### *1.5.5.2 Cultural differences*

The analysis of culture used in this study is based on the taxonomy developed by Hofstede (1980, 2001), as explained in detail in the following chapter. The cultural differences consequently observed between KSA and the UK are discussed at length in this paper, but at the outset the salient features of such differences can be summarised as the KSA having a high collectivistic/low individualistic culture, whereas the UK has a low collectivistic/high individualistic culture. Saudi Arabia is also characterised by a higher power distance. The concepts of collectivism, power distance, high and low context are discussed in more detail in the following chapter.

Anthropologically, the culture of Saudi Arabia is obviously rooted in Bedouin socio-economic organisation and traditional Arab-Islamic ethics (with less exposure to colonial influences compared to other Arab regions), which has made it one of the most conservative and religious in MENA. Islam plays a key central role in characterising the culture and defining the norms, attitudes, status and the functions within Arab-Islamic societies (Almunajjed, 1997). In Arab culture there is high regard for positions or status obtained by individuals. There is also widespread gender segregation



in KSA, based on Arab-Islamic cultural norms (Almunajjed, 1997; Wheeler, 2000), as a consequence of which communication between men and women is easier in online formats, including through emails (Al-Saggaf & Williamson, 2004). The potential adverse consequences on organisational cohesion and integration due to individuals on a professional level avoiding meeting each other in person for face-to-face interaction renders the use of e-communication or CMC highly relevant in Saudi Arabia (Hamdan, 2005).

The conservative culture makes Saudi Arabia the country of choice for the Study 1 for comparison with the UK to explore differences with Western society, associated with more freedom of speech, liberalism and democracy. The choice of the two countries is partly based on the obvious cultural disparity between them (e.g. Western liberal as compared to Eastern conservative), the expediency of large-scale collaboration between the nations in numerous sectors and the desire to contribute to this area of research in a growing field of practical relevance to inter-cultural collaboration. Table 1.1 below summarizes several differences between UK and KSA which may produce different reactions to norm violations.

The cultural differences between UK and KSA are expected to influence individuals' affective and behavioural reactions to norm violations in both cultures. It is expected that the reactions of the more collectivistic and higher power distance culture would be stronger than the reactions in the less collectivistic and lower power distance culture. Moreover, the more collectivistic and higher power distance culture is expected to be more in favour of in-group members than the less collectivistic and lower power distance culture. It is expected that the individuals from both cultural backgrounds (in UK and KSA) would vary in their affective and behavioural reactions according to the information they receive about the status and cultural background of the email sender. As consequences of these many differences between the UK and KSA, it may be difficult to disentangle which of these differences are of most importance in determining cultural differences in this research.

Table 1.1: Main similarities and differences between the United Kingdom and Saudi Arabia

	United Kingdom	Kingdom of Saudi Arabia
Culture	Financially and politically stable	Financially and politically stable
	Democratic government	Monarchy
	Liberal	Conservative, theocratic
	Represents the West	Represents GCC/ Middle East
	Various religions: normatively Christian	Has one religion: Islam
	Various cultures and ethnicities	Fewer cultures and ethnicities
	Gender integration: male/female balance in workforce	Gender segregation: more males than females in workforce
	More individualistic	More collectivistic
	Lower power distance	Higher power distance
	Low-context culture (send short emails, direct, brief)	High-context culture (indirect, longer emails)
	Less hierarchical work-status interrelations	More hierarchical work-status interrelations
	High regard for positions or status obtained by individuals.	High regard for positions or status obtained by individuals.
Technology	Leader of trading, industry and economy – financial centre	Developing, transitional country
	Leader of technological innovations	
Use of CMC	Platform of CMC and more users of the Internet.	Less dependent on CMC and Internet, CMC infrastructure still developing

#### 1.5.6 Need to replicate aspects of previous research

Finally, some aspects of the Study 1 were taken from McGoldrick's (2011) study design, including testing the mediating effect of emotional reactions, liking and attributions towards the email sender of a perceived email violation. In this research, affective responses (happiness, anger, worry, guilt, sadness and liking) and attributions were tested as mediator variables between norm violation perception and behavioural reactions. The relation between norm violation perception and behavioural reactions should be reduced (to zero in the case of total mediation) after controlling the relation between the mediator and the behavioural reactions. Study 1 also tested the moderating role of both culture and status on the relationship between norm violation perception and the variables of affective responses (happiness, anger, worry, guilt, sadness and liking, and attributions), and on the relationship between the variables of affective responses and three behavioural reactions to email violation, which include the tendency to comply with, move away, or move against an email sender who violates communication norms, which Vignovic and Thompson (2010) did not investigate (see Figure 2.3).

#### 1.6 Rationale for Study 2

Study 2 differs from Study 1 mainly in using an international business sample (not specifically UK or Saudi). Moreover, Study 2 tested additional moderating factors (see Figure 2.4) on the interaction of culture and status on email violation reactions (i.e. global identity, local identity, organisational trust, dispositional trust, extraversion and emotional stability personality traits), but

otherwise used the same email violation experimental approach as Study 1. Study 1 investigated the impact of social identity and status governing intergroup relations leading to categorise the sender into an in-group and out-group sender to explore the impact of cultural norms in explaining the differences in emotional and behavioural reactions to norm violations in email communication between the study samples and the experimental groups. The results of Study 1 revealed moderation effects of culture and status on the emotional and behavioural reactions to email communication violation. Study 1 focused more on the impact of the email sender's characteristics (social information provided). Study 2 also measures the email recipient's characteristics (e.g. global identity, trust, personality), to address research gaps, as email involves two-way communication, thus both sender and recipient characteristics are mutually influential on the recipient's behavioural reactions.

Study 2 extended the initial research by investigating the impact of global identity on the reaction to norm violations in email, as this variable is likely to influence reactions in an international business sample, used for a more global scale, which was not considered in the original social identity model of deindividuation effects (SIDE) model. Previous studies on email communications did not use global identity as a variable with regard to email communication, which justifies the need to test its importance in international email communications when a violation occurs. Erez et al. (2013) in their study of multicultural virtual teams (a key part of today's globalised organisations) highlighted the importance of global identity by capturing that it is a global characteristic that facilitates adaptation to the global work context and has an impact on behaviour of individuals in culturally diverse situations and communications. Global identity may influence emotional and behavioural reactions, such as reactions to norm violations in email communication between virtual team members. Global identity, which is a dimension of the socio-economic and cultural impacts of globalisation, can more suitably explain individuals' behaviour and reaction in the multicultural workplace.

Study 2 also extended the research in Study 1 by investigating the effect of trust (dispositional and organisational trust) on the reaction to email norm violations. Trust seems to play a crucial role in e-collaboration between team members from different cultural backgrounds (Berry, 2011; Fulmer & Gelfand, 2012). Global identity is directly linked with trust, as team trust enhances individuals' global identity (Erez et al., 2013). As members sharing a global identity develop a sense of trust in each other, their behaviour towards a norm violation in email communication by another member

might be more positive rather than negative, hence level of trust during international business email communications may influence reactions to violation.

Finally, Study 2 extended the research in Study 1 by examining the influence of two personality traits (extraversion and emotional stability) on reactions to email norm violations. Personality traits have been found to predict some outcomes such as burnout, aggressive emotions and behaviours, anxiety depressive, and substance use disorder, happiness and subjective well-being, positive and negative affect, communication and collaboration in virtual teams (Bakker et al., 2002; Barlett & Anderson, 2012; DeNeve & Copper, 1998; Kotov et al., 2010; Nimon & Graham, 2011), which justifies their inclusion, to see if high or low levels of these traits influence how people respond to the email sender's culture and work status. Personality traits such as extraversion and neuroticism may influence the affective and behavioural reactions towards a norm violation in email communication. While all five Big Five personality traits could have been investigated in Study 2, the author chose the two most commonly researched personality traits in organisations, high extraversion and high emotional stability, as these tend to be sought in candidates during selection and development, being more strongly associated with desired performance. More details of global identity, trust and personality traits are discussed in the following chapter.

- *Justification for international business sample in Study 2*

After completing Study 1 and analysing the data, the researcher decided to conduct a further study, to further test the research model in a different sector, and overcome several limitations identified in Study 1. As Study 1 focused on two public sector organisations (healthcare and higher education), the author decided to test the model in the private sector in Study 2. Second, as status and culture are central aspects of this study, the author decided to target multinational organisations for Study 2.

A review of literature on business communication revealed the importance of global versus local identity as a potential moderator of how business people interact with other cultures. High global identity would indicate a professional who feels a sense of belonging to the global world rather than the local culture, while high local identity would indicate a professional who feels a sense of belonging to the local identity or culture. An individual can be high on both global and local identity; they are not mutually exclusive.

The researcher also considered that personality traits might be important for moderating reactions to email violation, and included measures of extraversion and emotional stability in Study 2, as these are the main personality traits, measured in organisational psychology of candidate selection and work performance. Additionally, trust is considered a key element in online communication, which might moderate how a recipient perceives an email violation. As the researcher chose to study multicultural organisations in Study 2, the variables of organizational trust and dispositional trust were included as potential moderators in the research model.

Although the model and sample in Study 2 differs from Study 1, it was designed to be different; as the researcher did not intend to replicate Study 1 in two cross-cultural organizational sectors (UK and KSA), but to investigate additional factors that might moderate reactions to email violation in a typical multinational organization. Finally, unlike Study 1, Study 2 did not research differences within professional group dyads (e.g. doctor/nurse, lecturer/student), but focused on managers of all levels as one professional group.

International business is an emerging sector for multicultural email communication studies, and for industrial and organisational psychology scholars and consultants. The number of international business email users continues to grow. Worldwide email users are anticipated to increase to more than 2.8 billion users and associated revenue to grow to over \$23.5 billion by 2018 (Table 1.2), indicating that email remains the dominant online communication preference in international organisations (Radicati Group, 2014).

*Table 1.2: Worldwide email market forecast, 2014-2018*

	2014	2015	2016	2017	2018
Global email users (M)	2,504	2,586	2,627	2,760	2,849
% change		3%	3%	3%	3%
Global email market revenues (\$M)	\$12,041	\$14,438	\$17,767	\$20,435	\$23,546
% change		20%	23%	15%	15%

Source: Radicati Group (2014)

International business is a key sector of focus for social and organisational psychology, largely due to globalisation, which has resulted in multinational companies and global supply chain management systems employing people from numerous cultural backgrounds and countries, who must communicate across integrated systems and hierarchies. For Study 2, the inclusion criteria for the target population were participants who currently work in international business anywhere in the world, within one of the three target organisations. Three eligible business organisations were chosen, which are all based in Saudi Arabia, including InterContinental Hotels Group (IHG), the

Saline Conversion Corporation (SWCC) and its international collaborative partners, and Saybolt Saudi Arabia Ltd. These three organisations were selected because they represent three diverse industry sectors (i.e. leisure and hospitality; oil and gas; and water and power utilities). This increases the generalizability of results for modern international organisations. Although including Saudi-based multinational organisations would introduce some selection bias, as the majority of volunteer participants who took part in Study 2 are Saudi nationals, it could be argued that the 'location' of the target multinational organizations is irrelevant, as by definition a multinational organisation is international, multicultural and collaborates with many other international organisations, and thus with many other cultural groups. Finally, as the researcher is a Saudi national, it was justified to include three multinationals located in Saudi Arabia, which reduced access issues presented in trying to recruit three multinational organisations located in the UK.

Overall, the present research is highly justified, as there is an urgent need to improve collaborative e-mail exchange within and between cultures, professional sectors and professional groups, through first identifying which factors influence reactions towards perceived email norm violations. However, with the exception of three recent studies (McGoldrick, 2011; Milkman et al., 2014; Vignovic & Thompson, 2010), there has been only limited prior research identifying which factors mediate or moderate how people respond to email violation within organisational life. This clearly has important implications for all three professional sectors considered in this research, which are increasingly reliant on effective email communication, as Mackie et al. (2000) and Stephens et al. (2009) suggested.

## **1.7 Research Questions**

The research questions for Study 1 and Study 2 can be summarised as:

1. Does cultural background of the sender (same/different) moderate the impact of recipients' level of perceived email violation on their emotional reactions, and also moderate the influence of their emotional reactions on their behavioural reactions towards the email sender?
2. Does work status (higher/lower/same) of the sender moderate the impact of recipients' level of perceived email violation on their emotional reactions, and also moderate the influence of their emotional reactions on their behavioural reactions towards the email sender?

3. Are email recipients' behavioural reactions to norm violations in email communication mediated by the recipients' attributions and emotional reactions (i.e. liking, happiness, anger, sadness, guilt, or worry)?

Additional research questions for Study 2:

1. Are emotional and behavioural reactions to norm violations in email communication moderated by the receiver's global identity or local identity?
2. Are emotional and behavioural reactions to norm violations in email communication moderated by the receiver's dispositional trust and organisational trust?
3. Are emotional and behavioural reactions to norm violations in email communication moderated by the receiver's personality traits of extraversion and emotional stability?

### **1.8 Study 1 Aims and Objectives**

The aim of Study 1 was to extend previous research by Vignovic and Thompson (2010) and McGoldrick (2011), to evaluate in more detail the interaction of both culture and status of both an email sender and recipient affecting the recipient's emotional and behavioural reactions to an email violation, and to examine whether there is a causal link between the violation and emotional reactions, liking and attributions mediating this relationship. Cross-sectional testing of these effects was conducted in two countries (the UK and Saudi Arabia) for two different professional sectors (the higher education sample of lecturers and students, and the healthcare sample of doctors and nurses), using an experimental email vignette approach containing the same violation of technical errors and standard email etiquette violation, likely to be perceived as a violation of email communication norms in both countries/cultures.

Specific objectives of Study 1 were:

- To examine hypothesised moderation and interaction effects of status/culture of an email sender in the UK higher education sample.
- To examine hypothesised moderation and interaction effects of status/culture of an email sender in the KSA higher education sample.
- To examine hypothesised moderation and interaction effects of status/culture of an email sender in the UK healthcare sample.

- To examine hypothesised moderation and interaction effects of status/culture of an email sender in the KSA healthcare sample.
- To examine additional effects of Hofstede's cultural dimensions of high/low power distance and collectivism/individualism on emotional and behavioural reactions to the email violation, separately in all UK and KSA samples (higher education and healthcare).
- To test the mediating role of liking, attributions and emotional reactions on behavioural reactions to the email norms violation.
- To compare all results found between the UK and KSA samples, to see if the participants from either country/sector differed in their pattern of emotional and behavioural reactions to email norms violations, including all tested moderation and interaction effects of status/culture.
- To evaluate Study 1 results in relation to recent research by Vignovic and Thompson (2010), McGoldrick (2011), and Mackie et al. (2000); and to discuss and explain the Study 1 findings in relation to social identity theory in-group and out-group processes, the SIDE model, appraisal theory, intergroup emotions theory, and Hofstede's (1980) conceptualised cultural dimensions.
- Although Study 1's aims are largely theoretical (i.e. to extend previous research and test theory), any practical implications that can be drawn from the results will be disseminated to professionals in the higher education and healthcare sectors.

## **1.9 Study 2 Aims and Objectives**

The aim of Study 2 was to explore the moderation and interaction effects of an email sender's culture and status on emotional and behavioural reactions to email violation, in a new cross-sectional sample of international business people. The same experimental approach using an email vignette containing an email violation was used, but six additional moderating factors were tested including global identity, local identity, level of dispositional trust, organisational trust, two personality traits of extraversion and emotional stability on recipients' attributions, affective responses (e.g. anger, worry, sadness, guilt, happiness and liking) and behavioural tendencies (e.g. compliance, move against, or move away), in response to email violation.

Specific objectives of Study 2 were:



- To examine hypothesised moderation and interaction effects of status/culture of an email sender in an international business sample.
- To examine the effect of Hofstede's cultural dimensions of high/low power distance and collectivism/individualism on emotional and behavioural reactions to the email violation, in an international business sample.
- To investigate the moderation effect of global identity on all study outcomes in an international business sample.
- To investigate the moderation effect of local identity on all study outcomes in an international business sample.
- To investigate the moderation effect of organisational trust on all study outcomes in an international business sample.
- To investigate the moderation effect of dispositional trust on all study outcomes in an international business sample.
- To investigate the moderation effect of extraversion on all study outcomes in an international business sample.
- To investigate the moderation effect of emotional stability on all study outcomes in an international business sample.

Although the aims of Study 2 are also largely theoretical (i.e. to extend theory by testing effects of additional variables relevant to social identity/group identity, appraisal processes and intergroup emotions theory), any practical implications would be disseminated to the target sample.

### **1.10 Significance of the Research**

The research provides knowledge about the mediation effect of affective responses and the moderation effect of status and culture on the relationship between violation perceptions and affective and behavioural reactions. The research also provides knowledge about how people from different cultural backgrounds react when they receive an informal email, which may lead to a better understanding of cross-cultural differences, particularly between UK and Saudi Arabia in terms of emotional and behavioural reactions to norm violations in email communications regarding the information revealed about the sender's status and culture. The research also provides empirical evidence for employers to improve cooperation amongst organisations to enhance collaborations. Such knowledge of cultural differences may also facilitate intra-organisational collaboration by identifying factors which influence cultural norms in email communication. The

findings may therefore facilitate inter-disciplinary and cross-cultural collaborations in higher education, healthcare and business fields by improving communications in universities, hospitals and business in UK and Saudi. The research is the first to explore the relationship between cultural background and reactions to norm violations in email communications with regard to an email sender's status and culture.

The current research has theoretical and practical significance, in terms of testing the efficacy of social identity theory, the SIDE model and attribution theory, to explain how people respond to online email communication violation, as well as to help understand the varying impact of these social factors on different countries/cultures, professional sectors, and professional group identities, which will help to inform future interventions to address this problem. It is currently unknown whether the same social factors of both email sender and receiver (culture and work status) influence the recipients' reaction to email violation in different countries/cultures, or professional sectors/groups. In addition, varying reactions to email violations between participants from the UK and Saudi cultures, and from different professional cultures across higher education, healthcare, and international business groups, offered some interesting novel results that contribute to this emerging research on cross-cultural email communication. It is clear that the globalisation of email communication and its prevailing existence warrants more consideration from scholars than ever before.

The following chapter introduces the social factors identified in previous research and theory that are posited to influence how recipients respond to an email norm violation. Such factors include cultural background, social identity, status, global identity, trust and personality traits of the actors, and how each group is constrained by its own context, all of which have a bearing in their usage of electronic communication.

## **2 Theoretical Background and Literature Review**

### **2.1 Introduction**

The purpose of this chapter is to critically review relevant previous literature (theory and published research studies) on the topic under investigation, specifically the impact of cultural background and work status on how people perceive an email violation, and how this affects their emotional reactions (e.g. anger, sadness, guilt) and behavioural reactions (e.g. complying with the email request, moving away from the email sender, or moving against). The review includes literature related to six essential factors, namely social identity theory, status, culture, global identity, trust, personality traits (i.e. extraversion and emotional stability), that may influence the reaction to email communication violation. The aim is to establish the most appropriate theoretical framework for this research, which the author believes is social identity theory (Tajfel & Turner, 1979), and its updated application to online social individuation (explained via the SIDE model). The importance of work status in past research will be reviewed and linked to social identity theory. A central aspect of social identity theory is that individuals conform within their in-group in order to maintain their status and belonging within the group. In relation to the construct of cultural background (culture), this will be defined, and linked to Hofstede's (1980, 2001) conceptualization of cultural dimensions (collectivism/individualism), power distance (high/low), and Hall's (1976) high and low context communication (1976), which are all aspects of culture influencing individual perceptions and reactions during interpersonal communication. Theoretical approaches to other influencing factors (including personality traits, global identity and dispositional and organisational trust) are also reviewed. The gaps in previous published research will be identified, which have informed the research design in this thesis.

In this chapter, themes 1-8 (sections 2.5-12) examine the literature regarding the influence of norm violations on perception and attributions, affective and behavioural reactions in email communication within the healthcare and higher education sectors, as well as the impact of status and culture (collectivism/ individualism, high/ low power distance, high/ low context), and identify gaps in the research as yet unaddressed (Study 1). Themes 9-11 (sections 2.16-18) explore previous research on global and local identities; trust and propensity to trust; and personality traits (specifically, extraversion and emotional stability) in relation to communication and emotions within emails in a business context (Study 2). The chapter begins by reviewing how norm violations influence people's perception and attributions of the sender in email communication.

## 2.2 Theoretical basis

The social identity theory, self-categorisation theory and the social identity of deindividuation effect (SIDE) model are fundamental to understanding issues related to email communication as they pertain to the concept of social identity within a group. Social identity theory (Tajfel, 1978) proposes that people who have a salient social identity consider themselves to be group members rather than individuals (e.g. collectivist cultures, or specific work status groups). Social identity theory (Tajfel, 1978) attempts to explain how people inter-relate based on their social identities, which are processed and obtained via social cues from interaction partners. Self-conceptualisation involves numerous social constructions imparted from acculturation and experience in addition to personal cognition and proclivities, and multiple social identities manifest in group affirmations (e.g. gender, nationality, profession, religion, ethnicity, marital status, sexuality, and sports team or political affiliations) can contribute to individual self-identification.

One of the tenets of social identity theory is its insistence that psychological processes unfold (e.g. reactions to others) depending on the social context (Reicher, Spears & Haslam, 2010). The concept of self also varies by context, depending on which social identity is most salient. For example, in communication with colleagues within one's own organisation, one's group (i.e. organisation, department, or team) identity may become salient. Essentially, social identity theory suggests that the social cues around us (e.g. social structures and belief systems) influence what we do, in contrast to traditional approaches in Western psychology that emphasise individual autonomy (Reicher, Spears & Haslam, 2010). Tajfel (1972) criticised the tendency to attribute social conduct to individual tendencies and the relegation of social factors to a secondary role.

Social identity theory (Tajfel & Turner, 1986) and social categorisation theory are two component social psychological theories forming the social identity approach (Reicher, Spears & Haslam, 2010), which is concerned with the social processes of how people define themselves as members of a shared social group, looking at areas such as the creation of a 'social identity', and the point at which the individual or self and group identities are defined and predominant (Tajfel & Turner, 1986). Social identity research has provided important insights into how groups work in society, and how individuals relate to other individuals as members of their shared group (in-group) or another group (out-group), based on how they categorise themselves and others.

### 2.3 Group Identity

According to social identity theory, individuals establish a group identity through emphasising their similarities to other individuals who also have the same social identity, which forms the basis of the self-categorisation theory (see Figure 2.1) (Turner, 1981), in which self-categorisation acts as a factor of social attraction or protection of the in-group from out-groups (individuals who do not share their self-categorised social identity). Individuals are inclined to like, relate to, and forgive or ignore transgressions made by people who share the same social identity, a situation commonly referred to as in-group favouritism or bias, and individuals may evaluate in-group members more favourably than out-group members (Hogg & Abrams, 1988; Lea & Spears, 1992). Hence, social identity underpins group behaviour (Tajfel, 1978), as group members often share a goal. The more salient social identity becomes, the greater the conformity in group members' needs and goals.

Group identity can be defined as the self when described at the group level (Postmes, Spears & Lea, 2000), and it occurs when people come to define themselves in terms of group membership (Reicher, Spears & Haslam, 2010). Group identity can be better understood, and becomes more salient, when there is an out-group in contrast with whom differences are amplified. By creating or attributing a perceived group to be an 'out-group', out-group denigration can arguably lead to increased in-group cohesiveness (i.e. greater in-group bonding) and greater esteem of the in-group members (collective narcissism), thus creating a strong shared identity with the in-group and a lack of a shared identity with the out-group (Hinds & Mortensen, 2005). In contrast to the positive affiliative relationship with people from the in-group, there tends to be more distrust and stereotyping of out-group members, with their behaviour being appraised more negatively (e.g. slander, prejudice, discrimination and social rejection) and negative evaluations and attributions made when comparing their behaviour to the behaviour of the in-group members, as long as the in-group members follow implicit group norms (i.e. accepted/expected social behaviours, beliefs and rules), with a tendency to see the in-group's characteristics as superior. As a result, any perceived violation of social norms by out-group members can cause severe negative behavioural and emotional reactions, commonly referred to as out-group bias (Postmes et al., 2001), which is the opposite of in-group favouritism. This in-group/out-group self-categorisation process of social identity formation, in-group favouritism, and out-group bias is a universal human phenomenon across all cultures, but under normal circumstances it is stronger in collectivist cultures than in individualistic ones (Hui, Triandis & Yee, 1991).

Individuals may expect interactions with out-group members to be more troublesome and less efficient in the creation of successful relationships than interactions with in-group members (Mallett, Wilson & Gilbert, 2008; Richeson et al., 2007). However, one may not ignore the flexibility and the changing nature of an individual's identity that is a central part of the social identity theory. Hence, individuals can be perceived as in-group or out-group depending on the context determining the elasticity of their relationship.

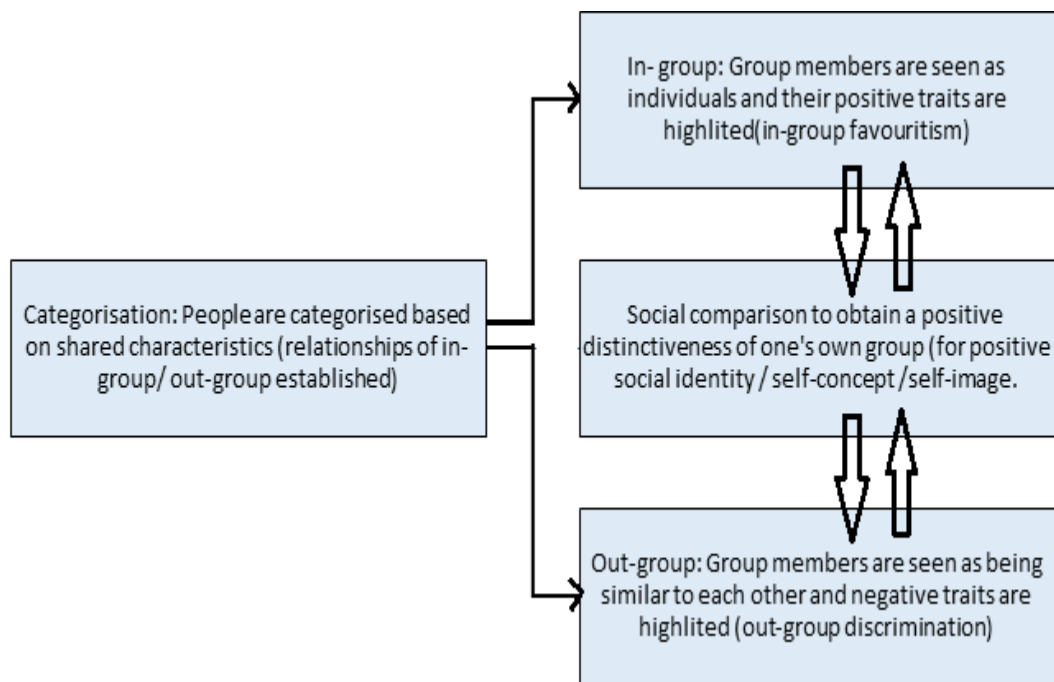


Figure 2.1: Group identity based on self-categorization (Tajfel & Turner, 1979). Source: IB Psychology (2014)

## 2.4 The SIDE Model

In response to the prevalence of online communication, SIDE is an online application of social identity theory developed by Postmes, Spears and Lea (1998). Email receivers, as in offline communication, may categorise email senders as in-group or out-group members, according to the information provided in the email about their work status and cultural background, as well as other possible identifying information (e.g. occupation/position, gender, ethnicity appraised from the sender's name, title and signature).

According to deindividuation theories, anonymity during CMC may reduce self-awareness and lead individuals to behave in anti-normative ways (Postmes, Spears & Lea, 1998). However, anonymity can also increase the influence of group identities. For example, as the email receiver cannot see/meet the email sender, clues are looked for within the email to form a mental image of who the sender is (e.g. cultural background, work status and gender), which are then used in calibrating an

emotional and affective response based on social/group identities. However, the SIDE model suggests that people involved in CMC behave and think in accordance with *their social identity* and less with their individual identity, if their social identity is salient in the context of the communication, e.g. during professional communication (Lea & Spears, 1995). The model therefore proposes that the more anonymous the individuals in CMC are, the more salient their group identity is, which may lead them to behave more consistently with regard to their group norms. When people become deindividuated (i.e. less personal and more anonymous) in CMC they are likely to categorize those who they perceive as different from themselves as out-group members and to enhance positive behaviours and positive attributions towards in-group members (Lea, Spears & Groot, 2001). Although the recipient of an email often has a limited awareness of the precise character and nature of the sender, one typically knows the name of the sender of an email, so they are not totally anonymous.

Awareness of identity rather than anonymity clearly has a great impact on in-group and out-group perceptions. Even within a group itself, gender identity, even if simulated, brings stronger team affiliation, which consequently enhances the perception of team-partner's competence as well as private acceptance of his/her opinions, as Lee (2007) found, admittedly in a gender-only commonality experiment. This is also true in dyadic collaboration, where even a sense of identity, not necessarily a real one, leads to improved collaboration, and both static cues and signals imparted by other means contribute to this (Tanis & Postmes, 2008). Milkman, Akinola and Chugh (2014) found that when professors were given information about fictional prospective students (names of students were randomly indicated according to gender and race such as Caucasian, Black, Hispanic, Indian, Chinese, but their messages were similar), looking to discuss opportunities of research before they apply for a doctoral programme, it was found that professors overlooked requests from women and minorities, but not requests from white males.

The importance of identity within virtual communication has also been explored in CMC studies, which found that in the absence (or manipulation) of visual and individual cues about a person/partner with whom they were collaborating online, people still tried to use any written information provided about the person to categorise them as someone with a shared identity or as an out-group member, which influenced their behaviour/attribution/reactions. Recent studies indicate that providing social information about the email sender may influence social identity categorisation of out-group members, by enhancing positive perceptions and understanding

amongst employees, which can help develop their relationships, and reduce in-/out-group effects (Axtell, Moser & McGoldrick, 2012).

## **2.5 Social Norms**

Self-categorisation into in- or out-groups undoubtedly affects norms, as there are increased feelings of similarity amongst in-group members, which may lead them to accept the group's norms and attributions (Postmes et al., 2001), and increase perceptions of difference amongst out-group members (Wang, Walther & Hancock, 2009). Individuals may tend to display behaviour consistent with group membership norms (Terry & Hogg, 1996; White, Terry & Hogg, 1994), and to adopt the group's values (Tajfel & Turner, 1979), which clearly has implications regarding email violation. This influence of in-group norms on behaviour is dependent on social identity being salient, which implies that the individual considers himself/herself as a group member rather than as an individual (Turner et al., 1987). In contrast, when social identity is not salient, an individual's emotions and behaviours may be consistent with his or her personal identity rather than with group norms, thus these norms may not influence their behaviour (Terry, Hogg & White, 1999). This can result in in-group bias, which can be determined by many factors such as the degree of self-identification with a certain group, the salience of social identity, the perception of intergroup relationships and how the out-group can be judged when making particular comparisons (Turner, 1999).

The significance of social norms in group communication is highlighted by Ata, Bastian, and Lusher (2009), who concluded from their study that social norms and group perceptions are important influencers of intergroup communication. Moreover, group norms provide indicators of acceptable and unacceptable behaviours, emotions and even types of thinking in certain situations and contexts (Matsumoto, Yoo & Fontaine, 2008), which can influence email communication and perceptions more than communicators' characteristics (Higa et al., 2000). However, in CMC interactions, it may not be easy to recognize these norms and guidelines of relationships and to understand some behaviours (Yum & Hara, 2006). As a consequence, the absence of shared norms amongst communicators may therefore hinder the formation of online social relationships (Yum & Hara, 2006).

Within virtual communication these group norms consist of communication norms, which represent a specific understanding of electronic interaction shared by in-group members (Cheshin et al., 2013). It is argued that different media channels create different communication norms, therefore



different norms may precipitate rifts between members of distributed teams (Cheshin et al., 2013). However, technological communication can be more efficient if communicators understand different norms – both cultural and emotional – and the effects of these norms on the interaction (Ashkanasy, Hartel & Daus, 2002). However, it has also been argued by Daft and Lengel (1986) that social norms are relatively absent in CMC (e.g. email), but as this study was carried out at a time when the internet was still in its infancy, this could no longer be relevant, given the massive global popularisation of ICT and the internet since the late 1990s. Subsequently many different approaches have come to the fore, not only facilitating more interactionist communication, but also allowing predictions to be made about future interaction, technology and social contexts.

Applying social norms to the present study, the development of consistent email norms within a particular group is likely to reinforce the social/group identity of those email users; that is, they no longer communicate by email as an individual, but as representatives of their social group, with all of its associated norms. According to this theory, email communication should be straightforward between in-group members (e.g. within the same profession), but this is over-simplistic, as in reality there are multiple norms operating at different levels within national, cultural, professional, organisational and work status group dimensions, and professionals of different cultures working in the same in-group and communicating with out-groups, as addressed by this research. University lecturers for example might perceive themselves to be members of their academic department in-group when contacting someone in a different department of the same university, as a member of their university when contacting peers in different universities, or as individuals when sending emails on purely personal matters.

### **2.5.1 Theme 1: The Influence of Norm Violations on Perception and Attributions in Email Communication**

Norm violations may lead to negative perceptions and attributions towards the email sender, in turn affecting the quality of electronic communication and collaboration. When comparing differences between individuals acting independently and within groups, Lea and Spears (1992) explored the hypothesis from social identity theory that de-individuated participants acting where group-identity was made salient would accept paralanguage in CMC more readily than when the salience of group identity was low. Lea and Spears (1992) conducted two lab-based experiments. Study 1 included two groups of 24 participants. The first group consisted of undergraduate students who never received email messages (novice group). The second group involved individuals who worked

in a large company and received many email messages in their daily work (expert group). Participants read three sets of messages containing different types of paralinguistic cues and a fourth set of control messages. They also completed a set of person-perception rating scales in respect of each message sender. Study 2 comprised of 48 undergraduate students who took part in group discussions over CMCs under four conditions, manipulated in a 2x2 between-subjects design. The salience of task group was either high or low, and participants were either de-individuated (physically isolated and visually anonymous) or individuated (physically co-present and visually identifiable). It was found that there were substantial variances in participants' perceptions of unidentified correspondents depending on the paralinguistic content of the emails they received. Paralanguage as one means of communicating social information through CMC is one result suggested by the study, with interpretation of paralinguistic indications is influenced by the social context of the communication. They found that high group identity has substantial positive impacts on the interpretation of social information transferred in CMC, under conditions of deindividuation. The findings indicate that high group salience and deindividuation in CMC are related to normative behaviour.

Further research into this issue was carried out by Jessmer and Anderson (2001), who examined the impacts of the politeness (polite vs. impolite) and grammatical correctness (grammatical vs, ungrammatical) of email messages on how recipients perceived the sender. Participants were 112 USA undergraduates who completed paper and online questionnaires. They were asked to read four email messages and imagine that they received these messages from an anonymous sender at their workplace. The researchers found that senders of polite grammatical messages were viewed the most positively and were accorded a favourable impression, although less polite and grammatical messages were more associated with high status males in electronic correspondence. However, these were tentative findings with a small sample, based on imagined (artificial) stimuli. The most striking finding was that impolite messages were seen as being authored by high status males.

Spelling errors can also affect the perception of the writer's cognitive and writing ability. Kreiner et al. (2002) studied the effect of spelling not from emails but from differently constructed essays. It was found that a small number of spelling errors did not affect ratings as regards writing or cognitive ability significantly, but when a larger number of errors prevailed, the students viewed this as more a reflection of writing ability than intellectual ability. Although it was found that college

students pointed that spelling mistakes may be caused by writing ability more than general cognitive abilities (e.g. intelligence and logical ability), the conclusion is that spelling errors do have an effect on how individuals perceive writers, especially with several spelling mistakes.

A further significant piece of research was the first study to examine how people form perceptions about an email sender who violates email communication norms, in the absence of other social information, apart from cultural cues (known/unknown). Vignovic and Thompson (2010) investigated the moderating effect of an email sender's culture on the recipient's perception of the sender characteristics (imputed from the social information provided). They found that technical email violations (grammar and spelling mistakes) negatively influence recipients' perceptions of email sender's intelligence, conscientiousness and trustworthiness indicating that lack of explicit situational information may prompt people to attribute email errors to the sender's personal attributes (e.g. intelligence/personality). However, providing cultural cues that the sender is foreign reduced the tendency to attribute technical email errors to an e-mail sender's personal characteristics. Vignovic and Thompson's (2010) was the first study to test and report the moderation effect of cultural cues in email norm violation. The recipient had more positive perceptions of the sender's intelligence and conscientiousness, but not cognitive trustworthiness, regardless of the email technical errors, when the cultural cue was present (foreign). They found that a recipient's negative perception of technical language violations, such as grammar and spelling errors, was moderated by cultural cues about the sender. When the sender's cultural cue was known (foreign), they had less negative perceptions of the technical email violation; but deviations in email etiquette were not moderated by cultural cues (known/unknown) of the sender (Vignovic & Thompson, 2010). In summary, email recipients were shown to rely more on a sender's personal characteristics for judging technical e-mail errors when the sender's cultural cue is unknown, but rely more on situational explanations when the cultural cue is known, even if that culture is foreign.

A limitation of this study is that Vignovic and Thompson (2010) did not consider the potentially moderating effect of the email receiver's personal characteristics (e.g. personality traits and trust), which are likely to interact with the sender's personal characteristics. Furthermore, classifying cultural cues as known/unknown, is not how they are typically typified in social identity theory, the normal route being through sameness or difference (i.e. in-group/out-group). In addition, while Vignovic and Thompson's study is highly innovative and original, it only considered cultural cues as

the socially salient information about the email sender. While other social cues are salient aspects of social identity in-group/out-group perception, such as work status, are not relevant in a student sample, they have major relevance in organisational (i.e. professional) email communication.

The importance of norm congruency and interpersonal familiarity when using email communication between superiors and subordinates was evaluated in a study by Stephens, Cowan and Houser (2011), from which they concluded that these factors elicit different attitudes among superiors and subordinates regarding their validity in determining attitude towards the message, impressions of credibility and willingness to comply with the request. They found that among subordinates there was a belief that superiors have a greatest tendency to comply with email appeals from unfamiliar juniors written according to organisational norms. Familiarity did not affect the superiors' compliance with other's requests. Juniors believe that it is vital to follow norms particularly if there is no familiarity in the relationship. The results evidently confirmed that superiors and juniors have dissimilar perceptions. Therefore, there may be some misinterpretations between superiors and subordinates when they work under different expectations in their email use. Different status groups in an organisation can perceive their email messages differently. The likelihood was that this higher education sample came with a strong organisational norm for formal written work, as arguably email communication norms are well-known to lecturers and students. Age and experience level differences between lecturers and students may also have negatively influenced the findings. It is essential to test these findings in a hierarchical setting where there are both formal and casual organisational norms for email utilisation to check if results can be generalized to other organisations outside higher education.

Carr and Stefaniak (2012) tested the impacts of user- and medium-generated cues on how message senders are perceived. Specifically, they assessed the interaction of low- and high-warrant cues on perceptions of the sender's professionalism, with 111 students in the USA. This study employed a 2 (mobile device vs. non-mobile device) x 2 (grammatically correct vs. grammatically erred) design to create four experimental conditions to look at cues that formed an impression of the sender's professionalism, hypothesising that correct grammar would lend credibility to the message. Results showed that whilst incorrect grammar (user-generated content) negatively influenced the receiver's perception, cues from the transmission medium (email sent from a mobile device vs. email sent from a non-mobile device) helped to temper this. The

transmission medium may offer recipients a cue reducing the negative impacts of the message content delivering information to account for possible medium effects on a message.

Looking at the relationship between distributed collaboration, situational invisibility and attribution, it has been found that working as distributed teammates increases reliance on internal dispositional attributions for partner's negative behaviour. Situational invisibility leads to this unless a situational explanation is provided (Cramton, Orvis & Wilson, 2007). In this laboratory study, 66 dyads consisting of one participant and one confederate participated in the study. The study used a 2 team configuration (collocated or distributed)  $\times$  2 provision of situational explanation (whether or not participants were given an explanation of their partner's situation) factorial design. The researcher found that locational differences and situation invisibility influence the distributed work relationships through mechanism of attribution. They also found that relational outcomes were affected by locus of attribution giving expression to aspects such as team satisfaction and feelings of social cohesion. The study concluded that the mechanism of attribution comes into play with situation invisibility and situational explanation, and greatly affects relationships under distributed conditions. When comparing distributed groups with collocated groups, dispositional attributions are usually greater in the former (Bazarova & Walther, 2008). Situational attributions vary depending on interaction between collocation/distribution and the level of dissimilarities in the behavioural performances of group members. This may be due to the fact that although technology facilitates interaction among participants, even from disparate locations, distribution may trigger biased attributes from the behaviour of remote members (Bazarova & Walther, 2008).

To sum up, situational information about remote collaborative partners can enhance communication as it may reduce dispositional influence, and it has been suggested that failure in collaboration amongst distributed teams may be resolved by providing situational information during communication with each other, as this tends to enhance understanding and correct attributions (Cramton et al., 2007). Electronic communication may be affected by social context, including geographic, organisational and situational variables, which include relationships between email senders and recipients in terms of demographic characteristics such as sex, age and race (Sproull & Kiesler, 1986). It is therefore apparent that providing information such as the status or cultural background of the sender may influence the receiver's reactions. For example, among doctors, whilst nurses may be categorised as an out-group, other doctors are considered to be in-group, and nurses may also have a similar perception of other nurses (in) and doctors (out) from

within their own groups. However, doctors would probably include nurses within their in-group if there were a discussion about the strengths and limitation of the NHS in which case all healthcare workers within the NHS would form a large in-group.

An additional factor that may enhance positive reactions to email communication is familiarity perception, and it can presumably be expected that any negative effects of email communications between individuals who have met face-to-face on many occasions would be much less than between those who have never met. However, this may depend in part on how friendly or otherwise the interactions were. Intergroup contact theory proposes that intergroup interaction reduces intergroup prejudice when optimal conditions are existing, including: equal status of the groups, common goals, intergroup collaboration, and the support of such interaction by an authority (Allport, 1954). Intergroup contact also increases positive feelings such as trust and forgiveness (Pettigrew et al., 2011), and decreases negative feelings (Aberson & Haag, 2007). The effects of intergroup contact can be manifest for ethnic and other identity groups (e.g. homosexuals), and Intergroup friendship and rapport is particularly vital. Moreover, these effects occur for the direct outgroup members and even for other outgroups not included in the interaction. The effects also appear across various age, gender and nation groups (Pettigrew et al., 2011). However, the theory looks at an individual in terms of cognition but ignores the affective side; intergroup contact considers the individual but not the group level of analysis. For example, racism will not be overcome by individual acts. The reduction of prejudice is dangerous and may delay required social change, which is enriched by social conflict. The effect of the intergroup contact is stronger among majority compared to minority groups (Pettigrew et al., 2011).

Norm violations may cause negative perception and attributions towards the email sender. Electronic messages can convey impressions about the sender and lead to differing attributions (Lea & Spears, 1992; Vignovic & Thompson, 2010). Norm violations in CMC tend to increase negative personal attributions rather than situational attributions (Cheshin et al., 2013). When individuals make negative attributions about others during intergroup interactions compared with intragroup interactions, they might avoid intergroup interactions (Shelton & Richeson, 2005). Thus, negative attributions stemming from perceptions of norm violation can diminish collaboration (Cramton et al., 2007; Stephens et al., 2011). Emotional experiences influence outcomes at work in areas such as attitudes toward workers and the organisation (Jordan et al., 2002).

### **2.5.2 Theme 2: The Influence of Norm Violation on Affective and Behavioural Reactions in Email Communication**

Appraisal theories of emotion are essential to consider when regarding affective reactions within email communication. The earliest piece of research indicating that affective and behavioural reactions to norm violation can be influenced by group identification was carried out by Mackie et al. (2000), who investigated the idea that group-based appraisals provoke certain emotions and behavioural tendencies toward out-groups when social identity is salient. Perception of in-group strength increases the likelihood of anger towards an out-group and the inclination to take action against them, with anger mediating these tendencies towards offensive action (Mackie et al., 2000). Results from this study showed that individuals with strong affiliation to in-group members were more likely to experience the emotion of anger toward the out-group members and to confront them. It was also found that anger mediated the effect of group identity on aggressive action tendencies. To generalise the results, this study would need to be replicated in real working environments with larger samples of people from different cultural backgrounds. However, although the study was limited in that it was not targeted on email communication, but was rather based on a letter distributed to a very small sample.

A further study that exemplifies how group identity can affect emotions and behaviours in a way that is consistent with appraisal theories of emotion is that of Yzerbyt et al. (2003). In this study, 95 participants, all French-speaking Belgians, recruited from the university libraries of the Catholic University of Louvain at Louvain-la-Neuve in Belgium, were asked to give 10 minutes of their time to complete a study questionnaire that allegedly aimed at surveying people's opinions about a series of events recently reported in national newspapers. The participants were also induced to identify victims as belonging to the same group as themselves. The results indicated that, when highly identifying with this group, emotional reactions of anger and offensive action tendencies became more dominant, thus indicating that anger mediated the effect of categorisation setting and identification on offensive and avoidance tendencies, as is understood within appraisal theories of emotion.

This influence of group norms on emotional reactions is also demonstrated by Costarelli (2005), who focused on high norm salience in his research, which is another factor that has an influence on the self-reported effect of participants' counter normative behaviour. In this study, Costarelli (2005) examined short communication emotional responses to in-group violations of norms in terms of the

moderating role of norm salience. Participants were 121 (in Study 1) and 119 (in Study 2) high-school students, while participants in Study 2 were 119 who volunteered to participate in this experiment, and were randomly allocated to conditions. When an intergroup norm is made salient, individuals who stated more in-group favouritism, showed a high possibility of increased self-directed negative emotions (felt more guilty and disappointed with themselves) being produced by deviation from the norms of a reference group, supporting the argument that strong prevailing in-group norm may moderate the emotional consequences of group norm violation (Costarelli, 2005).

Further evidence and insight into behavioural intentions and emotions is offered by Gordijn et al. (2006) in his test of a series of important predictions related to these issues. In their study, eighty six undergraduates of the University of Colorado, USA, were randomly assigned to one of two conditions in which attention was focused on either their similarities to the victims or on their similarities to the perpetrators. Salient similarities to the victim resulted in the predictable appraisal of a higher degree of unfairness against the victim, evoking a higher level of anger and making the participant more likely to take action, with participants also less prone to relate their support for such attitudes according to the level of identification with the salient in-group. However, similarities with the perpetrators were found to reverse the pattern of findings, with low identifiers becoming less likely to show support for the offending behaviour, whilst also feeling both anger and guilt, which were more highly related than in the other category, this anger mediating the impact of categorisation and identification on an intention to act and display of support for what the perpetrator has done. The mediational model emerging from these findings indicates that appraisal of the situation has a bearing on the tone of reaction that directs tendencies to action. The study thus clearly emphasises the role played by group identification in increasing the negative emotions and behaviours in intergroup relations.

Email style, whether casual or formal, has also been shown to have an important effect on affective and behavioural reactions. In a USA study, Stephens, Houser, and Cowan (2009) investigated the impact of students' overly casual email messages sent to their instructors. In Study 1, the experimental phase of this study, which used criteria-based sampling, along with network sampling, to solicit college level instructors with at least one semester of experience, 152 instructors were randomly assigned to experimental conditions. Study 2 further explored the findings from Study 1, and in addition to the instructor sample used in study one, included an additional 183 students, recruited from a single university in the Southwestern United States through a communication-



studies departmental research pool. The results clearly indicated some negative effects of using a casual style, finding that 'casual email messages sent to instructors cause the instructor to like the student less, view them as less credible, have a lesser opinion of the message quality, and make them less willing to comply with students' simple email requests' (Stephens et al., 2009, p. 318). This may be because students might have violated instructor expectations in their email messages. It was also found that lecturers cared more about the quality of the email message than students, with students not signing them and using short forms, regarding this casualness merely as a result of using technology, whilst lecturers saw this as being connected to training issues. These results give scope for further explorations and for sampling beyond the educational context.

As might be expected, politeness in emails, however, has been shown to have an opposite effect. Bolkan and Holmgren (2012), for example, investigated lecturers' perceptions of email messages written by students using different politeness strategies, analysing the effect of polite student email messages on lecturers' willingness to work with students and on their impression of students' competence and potential for achievement. Results showed that the utilisation of politeness strategies affected levels of emotion toward students, and that when teachers had a higher positive impression of their students, they were more inspired to work with them, maintaining a higher expectation of both students' competence and potential for accomplishment in their classrooms.

In summary, norm violation may generate negative emotions, which are normal outcomes of appraising an incident in a certain manner (Derks, Fischer & Bos, 2008). According to the cognitive appraisal theory of emotions, different appraisals of the same events can justify different emotional reactions to these events (Frijda, 1986; Smith & Ellsworth, 1985; Scherer, 1988). Hence different emotional reactions toward groups can be generated by different appraisals of the intergroup situations (Mackie et al., 2000). For example, anger can be generated when individuals appraise a certain event as preventing goal-achievement or as breaching social norms (Garcia-Prieto et al., 2003), whereas happiness is felt when individuals are positively confident about their expectations (Smith et al., 1993). However, it has been argued that this causality is frequently in the opposite direction. In other words, the appraisal often does not cause emotional reactions, but instead may be caused by the emotional reaction (Eysenck & Keane, 2010). Appraisal theory is also limited in fast and relatively 'automatic' emotional responses to situations. It is more designed to account for slower and more 'cognitive' processes preceding emotional experience.

According to self-categorisation theory, when people categorise themselves as belonging to a certain group, they believe in and support the group's norms (Turner et al., 1987). Maitner, Mackie and Smith (2006) found that satisfaction with an out-group arises when an action removes any threats from it, whilst anger against it arises or even increases when an action fails to manage its act of violation. In-group members may feel angry when out-group members behave unfairly towards certain in-group members (Gordijn et al., 2006). Furthermore, out-group violations generally lead to more negative emotions or behaviours than violations by in-groups (Axtell, Moser & McGoldrick, 2012; Postmes et al., 2001). McGoldrick (2011) found that out-group members are perceived as violating norms, and affective responses to casual email are more frequently negative; also, out-group bias caused students and lecturers to move against out-groups.

Individuals tend to turn against an out-group that has triggered emotions of anger in them. Individuals who have salient in-group identity will experience certain emotions toward out-group members as a result of intergroup context appraisals (Smith, 1993). Intergroup emotions theory (IET) proposes that various behavioural tendencies can be generated from different emotional reactions toward out-group members (Mackie, Maitner, & Smith, 2009; Mackie et al., 2000). Experience of particular emotions may increase the probability of certain behaviours against out-group members as a consequence of the strong relationship between emotions and action tendencies (Mackie et al., 2000). An intergroup emotion of anger was found to mediate an intergroup behaviour of the move against tendency (Gordijn et al., 2006; Mackie et al., 2000), which is an inclination or predisposition to aggress against an individual (Mackie et al., 2000).

However, norm violations by in-group members can be seen more negatively than those by out-groups in the black sheep phenomenon. An example of the black sheep effect is when in-group members act in dislikeable ways, and are subsequently evaluated more negatively than similarly dislikeable out-group members (Wang, Walther & Hancock, 2009). It therefore appears that negative reactions towards in-group members (e.g. from the same status or same cultural background) violating communication norms can be stronger than negative reactions towards members who may be considered to be out-group (e.g. from different status or different cultural background) due to the perceived degree of transgression of appropriate in-group norms. Furthermore, Castano et al. (2002) observed that high-identifiers judge deviants as black sheep and as atypical, and that the typical behavioural reaction towards in-group deviance is to move

against and move away, with someone who breaks a specific group norm judged more harshly than one who breaks a norm shared in common with an out-group (Castano et al., 2002).

It is therefore clear from previous research in this field that there is a connection between norm violations and affective and behavioural reactions within email communication, and being disrespectful of an individual's social norms or acting in violation of them in an organisation tends to bring negative effects in intercultural relations (Barak, 2000). Reactions to casual email messages shown to be less positive than polite messages couched in correct grammar (Jessmer & Anderson, 2001; Stephens et al., 2009), thus demonstrating that norm violations can have negative influences on email communication (Cheshin et al., 2013). Furthermore, strong negative emotional reactions arising from perceived email norm violations may result in adverse behavioural reactions against the sender, which may affect the communication and the possibility of future collaboration, demonstrating that both negative emotional experiences and negative attitudes can negatively affect relationships amongst members in online communication (Fujimoto et al., 2007; Milliken & Martins, 1996; Wilson, 2005).

### **2.5.3 Theme 3: The Influence of Status on Email Communication**

Distinctions in status, specifically professional/work status, are notable components when analysing intergroup behaviour. Indeed, a substantial amount of research in the area of social identity theory is concerned with the analysis of the varied reactions of high and low status group members to social injustices (Brown, 2000). The term 'status' itself has embraced many definitions, ranging from it being perceived as indicating specific classification that an individual belongs to within a precise social hierarchy (Sauder, Lynn & Podolny, 2012) to a "socially constructed, inter-subjectively agreed on and accepted ordering or ranking of individuals, groups, organisations, or activities in a social system" (Washington & Zajac, 2005, p. 284). A more comprehensive definition was posited by Jetten et al. (2000), who contend that status denotes the prestige or rank equated with a group's stance on the notion of comparison inside a social hierarchy. The researcher is inclined to the definition of status framed by Sproull and Kiesler (1986), as the position of an individual in relation to others with regards to professional or social standing. In any case, status is clearly central to perceptions shaped by social and group identity.

Differences in status levels between professionals from different cultural backgrounds may be expected to influence their online communication. Low status individuals may face a negative social identity that requires them to seek ways or paths of reaching or attaining positive social

identity, whereas those considered to be of high status have the opportunity to uphold or advance their affirmative feelings of being high status group members. Wright (2009) contends that the strategies that such groups use in order to uphold or achieve positive social identity is profoundly shaped and influenced by elements such as beliefs about the solidity and the legitimacy of status distinctions and the permeability of group borders.

Dubrovsky, Kiesler and Sethna (1991) studied the impact of status on computer-mediated and face-to-face decision making in groups. They discovered that high status members most frequently played the 'first advocate' role in meetings, placing them in a more influential position than later advocates, but when the meetings were conducted via email inequalities caused by latent status and expertise were significantly reduced. The position of 'first advocate' in discussions using email was taken up by members from across the status spectrum. Consequently, there was a greater distribution of influence amongst the groups. This study into the 'equalisation phenomenon' seems to confirm the notion that electronic communication can limit the impact of status and expertise on group dynamics. It must be noted, however, that this was a lab experiment involving individuals whose familiarity with one another, customs and pre-established groups may have affected the face-to-face decision making process. Furthermore, as they were all university students from the same country, this somewhat limits the broader implications of this study.

A cultural focus was added by Tan et al. (1998) to examine how CMC can change the impact of high status individuals on a group with relation to different cultures. By examining the culture of the US versus that of Singapore, intellect versus preference in task type and CMC versus unsupported communication, the study found that CMC was able to decrease the effects of status in-group communication in both sample groups, with some variations. Sustained influence was found to be of a lesser degree in the US groups than the Singaporean ones, however both showed a greater impact of higher status and sustained influence in the preference task groups, much more so than in the intellect task groups. Furthermore, a greater awareness of status was reported in Singapore, where groups were shown to be significantly impacted when working without CMC, thus indicating a greater degree of increased influence. Overall, CMC was shown to be able to reduce the negative effects of status in-groups of two different cultures. It can be ascertained from this that CMC can be used to negate the impact of status across cultural lines, however the limitations of the study should be noted. In his monumental study of IBM employees, Hofstede (1980) identified

national differences within a single organisation, which can say more about cultural impacts when extrapolated to consider the neutralising effect of CMC on status across all cultures.

Richness, power cue and email text were the subjects of Panteli's (2002) study into whether the textual content of emails varies across different levels of status. The indicative characteristics of difference were presentation, signature, language pattern and the manner of address attempting to identify whether they differ among senders at different hierarchical layers. From the analysis of a series of email messages circulated within two academic departments over several months, it was found that the medium of email communication in fact indicates, rather than reduces, status differences. A key outcome of this study was that it opened the way for greater appreciation of the explicit and non-explicit social cues determining status differences that are conveyed via email. Indeed, the way emails are composed, both in text and form, can produce some of the same indicators that are commonly employed to measure status differences in organisations. This study argues that email is quite possibly a richer medium than previously thought in the information richness theory.

After many had rushed to conclusions about the positive and negative social effects of this new communications medium, Spears et al. (2002) reviewed the power of influence and the influence of power of CMC, believing that this communication medium strengthened and reinforced rather than removed inequalities. The results of this review showed how this new communication medium can often be more 'social' and socially controlled than face-to-face interaction. Indeed, anonymity in online communication does not make the process any less social and the consequence can be even more social regarding various types of behaviour. This conclusion can also be applied to power relations, status and other social differences. Thus, although CMC can sometimes hinder cues of power or status, they are generally active in CMC.

Early impression formation, attribution formation and emotional and behavioural reactions related to status were explored by McGoldrick (2011) in her study of status effects, intergroup relations and reactions to perceived e-mail violations, with the overall goal of examining the impact of a lack of social cues in emails on the relationship between the participants in an email correspondence. The study tested the mediation effect of emotions and attributions on reactions and the moderating effect of status. Furthermore, it analysed if group or organisational identity can provoke the participants to react with in-group favouritism or out-group bias. The interactions showed significant levels of in-group protection and out-group bias, with status guarding against out-group bias. This

was observed as students perceived more violations from lecturers, and vice versa (lecturers perceived more violations from students). The out-group interactions created a higher level of anger than in-group correspondence. However, the study failed to consider the interaction between culture and status. Finally, the analysis only considered the behaviour and reactions of the senders, and not the characteristics of recipients.

To summarise, the awareness of limitations of these previous research methods should be taken into account. A key criticism of several of the studies carried out is that many were based on artificial groups that do not necessarily relate to real-life situations. Consequently, this may have limited the scope of the subjects' actions, and there was no room given for the display of alternative outcomes, as is possible in real-life situations and groups. Furthermore, the majority of the studies used groups of undergraduates and other students, either specifically to study phenomena in academic communication or due to research expedience, with the result that these studies are preoccupied with people of a certain age and at a certain stage in life. In sampling the groups, the researchers should also have considered that by taking individuals from the same institutions or companies, their findings may have been affected by the dominant working cultures of the respective institutions and companies. This means that they may have observed the way a group of people behaved in a specific work or educational context, thus limiting the validity of the results.

Despite these limitations of the previous literature, it is evident that there is a link between everyday informal communication and shared status and context (Hinds & Mortensen, 2005). According to social identity theory, a need for unique social identity enhances discrimination (Tajfel & Turner, 1979), which is affected by status (Oldmeadow & Fiske, 2010). High status members prefer in-groups in status-relevant contexts, whereas low status members prefer in-groups in status-irrelevant situations (Mullen et al., 1992). Individuals prefer out-groups, especially when the group is of high status under status-relevant scenarios (Mullen et al., 1992). Sachdev and Bourhis (1985) found that members of high status groups prefer in-groups whilst low status groups prefer out-groups. Reichl (1997) reported that low status members are in favour of out-groups in status-relevant dimensions but in favour of in-groups in status-irrelevant dimensions.

It has also been recognised that status dynamics are significant and can be credibly used to explain some organisational phenomena such as discrimination and grouping construction (Piazza & Castellucci, 2014). Therefore, status may cause inequalities and "shape the structure of groups and societies as well as, directly and indirectly, the opportunities of individuals" (Jasso, 2001, p.

96), and may influence an individual's appraisal and views about other characteristics (Berger, Rosenholtz & Zelditch, 1980). Furthermore, status has also been viewed as a tool to be used for future gain (Lin, 1999). For example, being of a high status may draw respect and credit, leading to several advantages (Lynn, Podolny & Tao, 2009).

It is possible to reach some conclusions from the literature regarding the impact of status differences on email communication. As social context clearly affects interpersonal communication through perception, understanding and behaviour, this means that status differences can hinder communication, but only when communicators are aware of them (Sproull & Kiesler, 1986). Furthermore, perception in electronic communication can be affected by the sender and receiver's characteristics and relationship (Byron, 2008). Electronic communication between co-workers can also be affected by differences in status, sex, age, and race, as well as the level of familiarity. Therefore, providing information about email sender's status and culture may enhance group identity and affect email communication. In the case of a shared identity and context, however, Hinds and Mortensen (2005) found that this can moderate differences and conflicts within a relationship. Shared identity also moderates the relationship between conflict and team distribution (Connaughton & Shuffler, 2007; Hinds & Mortensen, 2005). Individuals may have a strong desire to value themselves positively, leading to unrealistically positive self-perceptions (Taylor & Brown, 1988), whereby they may perceive their status as being higher than perceived by other people. However, Anderson et al. (2006) found that people were inclined to perceive their status accurately in relation to their perception of social acceptance; indeed, they were likely to engage in status self-effacement.

Furthermore, research confirms that when status is made salient in a communication, if individuals who appraise a situation share similar status, their emotional reactions may be less negative, which may not be the case if the status is not shared. Where status differs, the potential for anger and the tendency to take action is higher. This means that where status is shared and individuals can identify themselves with that status, their reaction shifts dramatically towards leniency. High identifiers would generally embrace higher levels of behaviour specific to a group as opposed to low identifiers (Branscombe & Wann, 1992). Thus, the study of status can shed light on the different emotional and behavioural reactions to communication occurring between individuals from different professional hierarchies within organisations. Status can therefore be an important factor in explaining a broad range of incidents happening within or between organisations (Piazza &

Castellucci, 2014), and is a useful pointer even in electronic communication. Employees' status and social identities may have an enormous impact on their electronic communication, for example using greeting and closing protocols in email communication is necessary for establishing good relationships, and is important with people of higher status or colleagues from other parts of the world (Waldvogel, 2007). Hence, status differences among email senders and recipients may affect their reactions to email communication. Therefore, differences or similarities between individuals in social status may enhance or hinder their email correspondence by generating positive or negative attitudes and perceptions towards the email sender.

Status may clearly be indicated in emails by status cues, which can often be deliberately or non-deliberately exposed in an organisation (Panteli, 2002). As professional and organisational identities establish how people view themselves in relation to their workplaces, these identities can noticeably influence how emails are created, therefore it can be stated that social identity and status is expressed by way of distinct linguistic fashions (Selfe & Meyer, 1991), with the possibility of individuals having one social identity for communicating with workers of a similar status and a different one for interacting with higher or lower status colleagues (Postmes et al., 2000). In addition, research carried out by Postmes et al. (2000) established that noticeable changes are made in how recipients opt to respond as a result of status cues found in emails, and how individuals adapt the formality of their emails when interacting with someone of a high status. As such, status may help to limit confusion and avoid insult by the adaptation of email styles when communicating with those of distinct status. Nonetheless, the prerequisites of formality for varied status groups in an organisation are often uninformed and subjective, thus paving the way for further misapprehensions.

To conclude, status has clearly been central to the study of CMC, as in contemporary society the use of teamwork is more prevalent, with a high level of communication taking place between groups and teams. As such, status plays a vital role in how individuals react when faced with norm violations on an online communication platform such as the email. Tan et al. (1998) in their research into reducing status effect in CMC found evidence that the use of CMC is in fact able to decrease the influence of status, regardless of national culture, so where the highly excessive effects of status prove to be harmful, the use of CMC may help to remove such effects. Furthermore, because of the anonymity in computer-mediated communication, status is considered to be less powerful in affecting the communication of team members (Postmes, Spears & Lea,



1998). However, individual identity can be more salient than group identity when specific information about individuals (e.g. a name or picture) is revealed, and according to SIDE, identity cues can have negative impacts on group performance (Blanchard, 2008). When information about the sender's status and culture is provided to the recipient through the email, this may indeed have a positive or negative influence on communication. This research investigates the influence of the recipient's perception of the email senders' status in relation to their own status. Recipients self-categorise themselves as higher/lower/same status in relation to their perception of the status of the sender. The research proceeds drawing on common assumptions that high-low status differentials are self-perceived among doctors and nurses and lecturers and students (respectively), and that their reactions to email stimuli reflect this.

#### **2.5.4 Theme 4: The Influence of Cultural Background on Email Communication**

The socio-economic dynamics of globalisation create more diversified workforces (Guirdham, 1999), with increasing use of global virtual teams (Grosse, 2002; Kaiser, Tullar & McKowen, 2000), with the result that diverse cultural groups are brought into closer contact within organisations and also across collaborating organisations more than ever before. A clear example of this transformation is the increasing diversity among healthcare professionals, such as doctors and nurses in the UK; about 30% of NHS doctors and nurses are from "ethnic minority groups, with approximately 30 per cent of doctors and 40 per cent of nurses born outside the UK" (Snow & Jones, 2011, p.1). In addition, the Office for National Statistics (2011) records that the number of non-UK-born workers increased by 1.7 million between 2002 and 2011, with more than one million coming from non-EU countries.

Culture has been defined as a "shared set of beliefs, attitudes, norms, values, and behaviour organised around a central theme and found among speakers of one language, in one time period, and in one geographic region" (Triandis, 1997, p. 443). Alternatively, it can be said to be a value and knowledge system that is conveyed between generations (Matsumoto & Juang, 2007), which can affect people's behaviour through the provision of values and strategies for promoting certain behaviour and discouraging others (Triandis, 2003). As such, it can maintain social consistency and avoid social disorder through norms for individual behaviour (Matsumoto et al., 2008). These cultural norms can be defined as "expressions of shared values and beliefs in a specific culture which shape attitudes, behaviours and expectations of what is appropriate in a given situation within a specific cultural context" (Moser & Axtell, 2013, p.4).

The concept of culture is clearly distinct from that of a country, in that a country always refers to a geographical location and political system, whereas culture can be described as “a society’s personality or (as) the glue that binds people together” (Watson et al., 2002, p. 924); thus one should be vigilant in avoiding conflation of “country” and “culture”, although they are generally used synonymously (Schaffer & Riordan, 2003), and consciously so in key cultural studies that use prevailing national culture as an analytical device (Hofstede, 2001). Countries generally encompass many undisputed determinants of culture, such as geographical, climate economic, technological, industrial, religious and linguistic commonalities; this is most obvious in Western Europe, where the conceptualisation of the nation and nationalism emerged, with each state occupying a uniform state with a predominant ethnicity speaking a common language (e.g. Franks speaking French in France, Anglo-Saxons speaking English in the UK), but this paradigm breaks down with more detailed analyses and more fissiparous political configurations (Peterson & Smith, 1997); for instance, the position of Welsh ethnicity and linguistic minorities in the devolving UK, or different nation states spanning otherwise homogenous ethnic groups such as those of the Arabic-speaking world across MENA. Thus with regard to *country*, one can understand *culture* in terms of predominant and embedded behaviours associated with populations. While cultures can be transposed or exported by numerous channels, such as via the media or migration, minority cultures are generally side-lined in the face of larger more dominant cultures within particular countries and in the world as a whole (e.g. Francophone and indigenous people in Canada, or Kurdish and Berber minorities in Arab-majority countries in MENA).

The study of culture in the context of countries can become difficult and complex, because of the inherent complexities of these constructs themselves. For example, Arabs, Pakistanis and Indians who live in Western countries may differ in a *cultural* sense from Arabs, Pakistanis and Indians who live in Eastern countries, particularly second- and third-generation ‘immigrant’ communities, who generally exhibit a hybrid culture affected by economic, social, financial and other cultural factors. All *cultures* are affected by a diverse range of factors within each individual *country* and therefore this must be taken into account by researchers.

The use of communication technology across cultures clearly has limitations and difficulties, and figuring out how to handle innovation and manage distinctive cultures represents a great challenge. Email communication between virtual intercultural teams was explored by Grosse (2002), who studied the management of communication within virtual intercultural teams. The study found that

virtual teams need to select the most appropriate communication channel for their purposes, but it is acknowledged that initial face-to-face contact is essential to build trust and establish relationships. In addition, having appropriate levels of understanding means that virtual communication can function more effectively. Clearly email channel is the most convenient channel of communication for virtual teams, and although the phone is a more personal tool of communication, it can be harder to use than email when speakers have different native languages (however, for conferences involving larger numbers of individuals, videoconferences may be more effective). Results demonstrated that as global organisations become more dependent on virtual groups, there is a need to train business students to succeed in the aspect of intercultural team communication.

Waldvogel (2007) looked at the different cultural email salutations and sign-offs in two different working environments in New Zealand. The results showed that in the industrial plant, the more widespread use of email greetings and closings indicated open and positive relationships between employees and managers, and also demonstrated that the culture in the workplace was straightforward and friendly. Although gender, status and social distance were found to have some effects on forming email greetings and closings, the influence of organisational culture in the workplace was far greater. The use or non-use of openings (*Hi, Dear* etc.) and closings (*Cheers, Thank you* etc.) in these two centres was indicative of the mood of the people in the workplace (e.g. in terms of *solidarity* and *business-like*). Considering the effect of status and social distance when writing emails is a reasonable approach; generally, emails should be polite, with suitable greetings and closings, depending on the cultural context.

Arabic email language formed the focus of a study by Najeeb et al. (2012) in Malaysia in which the emails of Arabic postgraduate students at Malaysian universities were investigated to identify their politeness strategies in requests, their request strategies, the use of Arabic expressions transferred into English and the perception of academic staff towards Arabic students' email language. The study found that the students had a poor grasp not only of the English language (some used telephone texting language in emails) but also of local culture. When communicating through email in English, Arab students were found to be more direct. The conclusion drawn from this is that they needed to be trained in 'email awareness-raising instruction' before proceeding with their studies in Malaysia. This is a limited research area confined to the needs of Malaysian universities, but the

statement about the need to understand cultural issues when emailing in a foreign language offers some insight on how to make the medium work better for its users.

This compares with a study among Iranian post-graduate students in Malaysia conducted by Hallajian and David (2014). They found that even though the students were proficient in English (according to IELTS scores) there were emails that could potentially cause offence, for example by lacking salutations (12%) or forms of address (7%). The students were generally aware of openings and closings in emails but not necessarily the formal ones, with some using the first name rather than surnames or last names, perhaps in deference to the Malaysian practice (people in Southeast Asia traditionally do not have surnames). However, the general tendency was towards the formal, as many used closings (87%), but generally there was no understanding of the way openings and closings work in particular contexts. Although the study was limited by its relatively small sample size, it does indicate a further need for email language training.

To sum up, culture can be an important factor to consider in email communication. Yum and Hara (2006) suggest that people from different cultural backgrounds might form certain cultural norms of online interactions that govern their online communication. Goodwin (1996) noted that online platforms can be very engaging, as behind the smoke screen of anonymity an individual can communicate with complete strangers in a personal manner, hence relationships are often formed more easily online than offline, so cultural norms can be formed more easily in this way (more recent developments such as the proliferation of scams and online trolling indicate the opposite effect of anonymity). In stressing the salient effects of culture on communication, Fine (1991) argued that people from different cultural backgrounds, with a "shared set of beliefs, attitudes, norms, values, and behaviour organised around a central theme and found among speakers of one language, in one time period, and in one geographic region" introduce different meanings, values, assumptions and discourse styles, with potentially disastrous effects on the organisation (Triandis, 1997, p. 443). Thus, the realities of globalized economies require an understanding of inter-cultural communication and diversity issues in workplaces (Cheney et al., 2004).

Previous research on cultural diversity has shown that despite the many advantages of culturally diverse teams, their members have different norms and values which can influence their communication, collaboration and work performance (Connaughton & Shuffler, 2007). As a result, members' behaviours and expectations of each other will be affected (Kiesler & Cummings, 2002). Moreover, individuals who hold different norms might have different perceptions of appropriate and

inappropriate behaviour (Hinds & Bailey, 2003). Therefore, communication norms in virtual teams need to be considered, clarified and regulated, and messages between virtual team members should carry situational, relational and social information (Moser & Axtell, 2013). To date, there has been little or no consideration of the interaction between norms and cultural background in virtual work (Moser & Axtell, 2013). Therefore, cross-cultural studies of norms governing email communication may facilitate electronic communication between distributed teams.

Much cross-cultural misunderstanding can be traced to a failure to understand other cultures' basic assumptions and social norms in communication, including email communication (Brislin, 1993; Hofstede, 1991; Triandis, 1994). It can be presumed that understanding what constitutes an email norm violation in different cultures begins with a recognition that its members are following discourse rules that make sense from within their own cultural norms (Condit, 1993). According to Hofstede (1991) and Triandis (1994), the underlying reasons for this are that cultures around the world vary their communication rules along two key dimensions, balancing between individual/collective identity and power distance. Hall's (1976, 1990) low/high-context framework of intercultural cultural communication has been widely applied to CMC and to internet forum communication (Dahl, 2004).

It has already been noted that cultural differences influence the manner in which emails are written and perceived. Waldvogel (2007) found that the efficiency of email messages results from the greeting and closing language used, and that messages that include suitable greetings and closings affect relationships in the workplace and reflect organisational culture. Cultural differences should also be considered before deciding on the greeting and closing language used in emails (Waldvogel, 2007). Furthermore, an email writer can sometimes be a non-native English speaker, which is often the case when different organisations collaborate, and bearing this possibility in mind can moderate the tendency to perceive messages incorrectly due to email errors (Vignovic & Thompson, 2010). Moreover, the cultural background of the email reader may clearly influence the perception violations when encountering certain words of greeting or closing in email correspondence. Literature in relation to three main culture diminutions (i.e. collectivism/individualism, power distance, high/low context) may influence email communication, as discussed in the following sections.

### **2.5.5 Theme 5: The Influences of Cultural Background (Collectivist/ Individualist) on Email Communication**

Individualism and collectivism are perhaps the most important constructs in culture, an area which has been extensively studied within social psychology (Hogg et al., 2004; Markus & Kitayama, 1991), with Hofstede (1980) considering them to be important expressions of cultural differences. These concepts can be described as cultural dimensions that an individual may rely on to differentiate people of specific cultures (Triandis, 2003), which are distinguishable through four features: self, aims, relationships and determinants of actions (Triandis, 1995). Individualists tend to be self-independent, have personal aims and enhanced personal relationships, and their behaviour is significantly determined by attitudes; collectivists are likely to be interdependent, have in-group aims, and encourage social relationships. The concept of individualism characterises a cultural phenomenon in which the basic unit of socio-economic and cultural activity is the individual, and society is geared toward to utilitarian facilitation of the happiness of individuals (Triandis, 1995). In contrast, collectivism refers to its opposite, where the group is the basic unit and value is attributed to societal structures to the extent that they support preservation and the enhancement of group resources. Individualist cultures include Western societies (particularly those of Protestant heritage), such as the USA, the UK and the Netherlands, while Eastern societies (e.g. Chinese, Indian and Arab-Islamic) are generally regarded as more collectivist (Landy & Conte, 2010). This concept of collectivism versus individualism has been widely reviewed within an organisational context. Gardenswartz and Rowe (2001) "identified five areas that are considered particularly important in organisations operating across cultures: hierarchy and status, group versus individual orientation, time consciousness, communication styles and patterns, and conflict resolution" (cited in Silverthorne, 2005, p.2).

Culture may affect social behaviour, as demonstrated by Triandis et al. (1988), looking at individualism and collectivism and how they affect self-in-group relationships. The results showed that "subordination of in-group goals to personal goals may be the most important aspect of US individualism" (Triandis et al., 1988, p. 323). Societies interpret themes such as independence, achievement and competition differently; under detailed investigation, the patterns of these factors were found to vary across cultures. The most significant finding of Triandis et al. (1988) was that self and in-group relationships are influenced by cultural and personality differences, thus increasing understanding of how culture influences social behaviour (e.g. feeling similar and being attentive to the views of others).

Attributional biases in individualistic and collectivistic cultures were investigated by Al-Zahrani and Kaplowitz (1993), comparing results between Americans and Saudis. Theoretical assumptions were that Saudis (in comparison to Americans) would take part in: 1) less interior attributions 2) less self-serving inclination 3) all the more in-group-serving predisposition (both family-serving and in-group nationality-serving) 4) all the more out-group-criticizing predisposition. Americans were found to make more internal attributions, whereas Saudis indicated more out-group-disparaging and intergroup inclination. Both cultures showed differences in attributions for morality and achievement, but there were indications that Saudis were more collectivistic at an individual level, although with culture controlled these measures had no major impact on attributions. True to expectation, Americans made more internal attributions than Saudis, with the latter being more inclined towards out-group-criticizing attribution than the former.

While the individualism-collectivism construct is generally endorsed, it is not without its critics. Schwarz (1994) expressed concern that Hofstede's individualism-collectivism dimension was too extensive and does not allow for voluntary and self-determining action by people to help others. However, Silverthorne (2005) maintains that individualism-collectivism is the best means to measure value differences across cultures, especially between East and West.

Cho and Lee (2008) examined collaborative information seeking in intercultural CMC groups and tested the influence of social context using social network analysis. The authors directed a field experiment in which 86 students from three universities (one in the United States, two in Singapore) were involved in a shared learning practice utilizing a CMC framework. The outcomes showed that the social context (i.e. preexisting social network, intergroup boundaries, and culture) significantly limits the information sharing in intercultural CMC groups. The authors additionally found that social information seeking can be influenced by other issues, such as national cultures and people's expectations of the internet. They found that culture influences information sharing in CMC with others in collaborative teams, which supports the argument that culture has a crucial influence on collaboration amongst organisations that use CMC tools. The study found that the information provided by out-groups can be accepted more frequently by individualists than by collectivists. This study was conducted within an educational context, and all the participants were college students.

Hwang (2012) explored the moderating impacts of collectivist cultural orientation on knowledge sharing in the online learning environment. The study demonstrated that the impacts of social

norms on attitudes toward information sharing via email were indeed positively moderated by collectivist cultural orientation. Moreover, the study also concluded that group norms were more robust than lecturer or classmate norms.

To summarise, when comparing the effects of collectivist and individualist cultures on communication, it has been shown that those from collectivistic cultures are less likely than people from individualistic cultures to share information with out-group members (Chee et al., 1999). Research also indicates that collectivists share information with others according to the derivation of this information; if it comes from in-group members, it is likely to be deemed trustworthy, whereas if it comes from out-group members it is likely to be considered as unreliable, as individualists choose information containing value and quality (Cho & Lee, 2008). In addition, people from an individualistic culture are linked less frequently to any group, although they form more numerous in-groups, whereas individuals from collectivistic cultures have fewer relationships with various in-groups, but engage with these in-groups to a greater extent than do individualists (Hui et al., 1991). Furthermore, collectivists are more consistent with their in-groups, disallowing social inconsistency (Bond & Smith, 1996) while individualists develop less consistency within groups, because they do not depend on group membership to achieve their tasks (Matsumoto et al., 2008).

In communication, individualism-collectivism has been used to describe the different communication patterns across cultures. According to Ting-Toomey (1999), individualists feel a sense of entitlement to broadcast their own feelings and ideas, whereas collectivists are inhibited in this by their concern for the opinions and potential reactions of others. There is an obvious danger of labelling cultures as either individualistic or collectivistic when in reality all cultures manifest an interplay of the two trends. Triandis (1995) and Hofstede (2001) have both been extensively critiqued, particularly with regard to projecting attributes on national cultures and assuming such cultures to be homogenous and static. Methodologically, Oyserman, Coon and Kemmelmeier (2002), after a thorough study of samples collected from different nations, pointed out the absence of any standard scales, and that differences in samples and scales resulted in the production of divergent results, thus posing a challenge to the validity of prevailing theories. Individualism, for instance, was found not to be a direct opposite of collectivism, and the US and Canada were found to be more individualistic and less collectivistic when compared to other countries, but in no way near the polar end of the range (Fiske, 2002). In addition to the ambiguities present, Oyserman et



al. (2002) also discovered the existence of high levels of heterogeneity in the results collected from samples, hence it is not possible to draw generalizations from these findings.

The strength of the individualism-collectivism operationalisation of culture is “that it sets the stage for specific and testable predictive models”, and it has therefore been helpful in that it has “led to specific and novel predictions about how culture influences work and its impact on basic psychological processes” (Lee & Oyserman, 2010, p 257). It is also important to note that this dichotomy may also exist within the same culture. Lee and Oyserman (2010) suggested that a preponderant number of social scientists hold the view that “individualism and collectivism are not opposing ends of the same dimension, but are rather domain-specific, orthogonal constructs differentially elicited by current contextual and social cues” (Lee and Oyserman, 2010, p 262). Within countries, Triandis et al. (2001) found that only 60% (each) of those living in individualistic or collectivist cultures had stereotypical individualistic or collectivistic beliefs.

Furthermore, the treatment of culture itself has been questioned. Fiske (2002) asserts that collectivism and individualism as theories treat nations as cultures, and culture itself is viewed as a constant quantifiable variable. However, some people are capable of partaking in multiple cultures, and some countries consist of hundreds of highly distinct cultures. The use of citizenship as a way of measuring and sampling culture is also deeply ambiguous. Moreover, Fiske (2002) also refers to culture as a phenomenon comprised of intangible parts that are inaccessible to the conscious or open verbal expressions, an important issue that proponents of collectivism and individualism fail to keep in mind in their sampling of groups of people from various cultures, instead assuming that each group of individuals represents their culture in totality, even the intangible part.

A further criticism of the existing literature in this area has been raised by Miller (2002), who, citing Oyserman et al. (2002), refers to problems arising from skewed results in research carried out in populations hitherto studied, which aim to demonstrate how individualism and collectivism predict behaviour on a global scale. The latest research in the area, involving only two cultural comparisons, has been deemed biased as it over-represents the East Asian culture. Similarly, in cross-cultural examinations, another problem in sampling has arisen as they consisted solely of college students (Miller, 2002). Despite the contentiousness and the shortcomings in previous research, the factors of collectivism/individualism are considered to be important components of cultural difference and are hence used in this study.

The Anglo-Saxon ethnicity (i.e. of the UK, North America and Australasia) has traditionally been viewed (as proclaimed by its own ideologues) as the individualist culture par excellence (Macfarlane, 1991). With particular relevance to this study, although the UK has a less collectivistic culture than Arabic countries such as KSA (Hofstede, 1980), it in fact comprises many diverse cultures of groups of people who are both individualistic and collectivistic. Likewise, Saudi Arabia cannot be deemed to be entirely collectivistic, although as a nation it is generally more collectivistic than individualistic.

#### **2.5.6 Theme 6: The Influence of Cultural Background (High/ Low Power Distance) on Email Communication**

High or low power distance is another useful way of expressing cultural differences. The concept of distance was identified by Hofstede (2001) as one of the four dimensions of national culture, making a distinction between lower power distance and higher power distance cultures. Power distance can be defined as “the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally” (Hofstede, 2001, p. 98); in other words, the existence of social inequality, as demonstrated by the comparative percentages of people who opt for consultative leadership as opposed to autocratic or directive leadership. In high power distance cultures there are social norms of unequal hierarchy and people take advantage of power as much as they can, with inferiors viewing superiors as intrinsically different from and superior to them, and there is an expectation that different degrees of power influence behaviour (Hofstede, 2001). Examples of high power distance cultures include India, Malaysia, Panama and the Arab World (Tuleja, 2009, p. 100). In low power distance cultures, organisations are flatter, and communication is less formal, as status is already solidified and there is no need for repeated reinforcement (Tuleja, 2009, p. 104). Thus, particularly in the context of intercultural communication, it is to be expected that the factor of power distance can clearly influence email communication.

Power distance has been found to be an important factor in communication of negative feedback. In high power distance cultures criticism from someone of a higher status is readily accepted, while that from a lower ranked person is considered a threat to social order and the hierarchy. In contrast, in a low power distant culture, the feedback is considered more in terms of its intrinsic validity, so the source of the feedback is less relevant (Atwater & Waldman, 2008, p 33).

The effect of power distance on email communication has been explored in several studies. Huang, Lu and Wong (2003) studied the effect of power distance on email acceptance among the people of the People's Republic of China (PRC). This study aimed to test the acceptance of innovation and also to examine how individuals' behavioural expectations of innovation could be impacted by cultural values. Results demonstrated that the effects of PD are extremely important on the acceptance of email users, as it moderated the relationship between subjective norm and perceived usefulness. It was concluded that the higher the level of power distance, the lesser its impact on the subjective norm-perceived usefulness relationship.

The issue of power distance was also examined by Bjørge (2007) in the context of English lingua franca email communication, investigating the level of formality in international students' emails to academic staff, and how national cultures impact differently in professor-student email communication. Hofstede's social measurement of power distance was used to mark distinctions between relatively high and relatively low power distance cultures. The outcomes demonstrated that students from high power distance cultures were more inclined towards formal alternatives, and that cultural background in terms of high or low power distance informed the way students chose greetings and closings in their emails, therefore it should be taken into consideration when analysing English lingua franca in communication.

Differences in email communication norms used by students from Iran and America were examined by Samar and Mehrani (2012) in their study of the influence of power distance on students' choice of communication strategies. The results displayed that both Iranian and American students' choices of opening and closing protocols vary according to the institutional distance (e.g. status) of the person to whom they write the emails. There were also differences in the use of politeness strategies in American and Iranian email communication, with Iranian email behaviour being more greatly influenced by both social and cultural norms and the institutional distance in email communication.

The connection between power groups and the use of politeness strategies was explored by AIAfnan (2014), who looked at the issue of respect and politeness in business writing and the effects of ethnicity and related factors on email communication in relation to the ethnicity of the communicators, power relations and social distance. It was found that although different ethnicities in various places worked politeness strategies differently, Malaysian workers (i.e. Malaysians, Chinese Malaysians, and Indian Malaysians), fundamentally utilised indirect positive and negative

politeness strategies to establish a relationship with the receiver on the personal level. It was also found that social distance played a more important role in the choice of politeness strategies than power imbalance, as Malaysians appeared to be more polite with more distant colleagues compared to closer ones.

To sum up, email communication is clearly affected by the differences between low power and high power distance cultures, therefore intercultural communication can also be improved by understanding differences in the norms of writing email amongst individuals, groups and organisations from different cultural backgrounds. For example, the choice of appropriate forms of address and honorifics in written correspondence has been considered critical to the maintenance of rapport (Bjørge, 2007). Also, culture is the main factor in determining the level of formality or informality of language, self-disclosure, and emotional language in communication. Bjørge (2007) found that emails written by students from high power-distance cultures are more likely to include a formal greeting and formal or conventional closes, whereas emails written by students from low power-distance cultures are less formal. When comparing Indian to German cultures, Pflug (2011) found that lower levels of self-disclosure and more use of emotions, were displayed by members of Indian web forums compared to their German counterparts (Pflug, 2011). From this research it can be assumed that higher power distance individuals may prefer to receive formal email messages, and that informal emails may generate negative reactions within these cultures.

However, the concept of power distance was criticised by Ly (2013), who indicated that the concept was culturally biased as it was created by Western scholars to represent a Western vision. Ly (2013) added that although the concept of power distance is useful to describe the hierarchical differences in various cultures, the concept does not explain why there is hierarchy in each culture. Moreover, individuals may be (and increasingly *are*) affected by globalized culture, therefore they should not be restricted or categorized according to their national identity. Furthermore, individuals' behaviour and reaction to cultural differences may be influenced by some parameters that should be considered such as age, gender, the experience of a certain foreign culture, or training in dealing with a specific culture.

Low power distance and high power distance cultures have a number of distinct differences that have a direct impact on communication patterns. In communication for instance, Ting-Toomey (1999) argues that individuals from low power distance cultures (e.g. Australia and Canada) are likely to use nonverbal emotional cues to create equal relationships, whereas individuals from high

power distance cultures (e.g. South American and Arabs), incline to use nonverbal emotional cues to show asymmetrical relationships.

It may also be essential to compare the UK and KSA from the perspective of low power distance and high power distance. The UK's culture can be described as a low power distance culture because it is a democratic and capitalistic nation, grounded in free market economics and minimum government intervention in many spheres of business and social life. As such, it believes in explicitly spelled out agreements, which results in a relatively lower power distance compared to Saudi Arabia, which represents a culture where the power distance is relatively higher, as individuals accept and expect unequal power distribution, in a country where the government holds the power and prestige to micromanage most social, business and political affairs. Regarding reactions to norm violations, it is expected that affective and behavioural reactions would be stronger in higher power distance cultures than in those that are lower power distance. Thus, there are obvious cultural differences between the UK and KSA.

#### **2.5.7 Theme 7: The Influence of Cultural Background (High/ Low Context) on Email Communication**

Hall (1992) asserts that culture determines both the content and format of communication, categorizing such interactive behaviours as high-context and low-context, which differ according to the volume of contextual information that is essential for the information "transaction" (Hall, 1976). Low-context cultures usually communicate clearly, explicitly, directly and verbally, providing detailed, precise information which is to be understood literally, with an emphasis on facts, with the result that low-context communicators may often be recognised as cold and detached (Hall & Hall, 1990). In contrast, high-context communicators place more emphasis on oral interaction and agreements, and typically communicate in formal, indirect, nonverbal and emotional ways, with information more often suggested or alluded to rather than factual, using indirect messages to express their opinions (Richardson & Smith, 2007), as a result of which low-context communicators often perceive them as polite but evasive (Hall, 1976, as cited in Pflug, 2011, p.131). Low-context cultures include countries such as west Europe (e.g. the UK) and North America, while high-context cultures include countries like the Arab Gulf states (e.g. KSA) and Japan (Hooker, 2012). These concepts also relate to the individualist/collectivist distinction, with collectivists being generally considered to be high-context and individualists low-context. The resulting differences in

communication styles may clearly disrupt cross-culture communication, consequently the impact of cultural context should not be ignored in email communications.

The effect of high and low context has been discovered in several studies. Wurtz (2006) used a cross-cultural analysis of websites from high-context and low-context cultures to explore the impact of these differences in intercultural communication. Results showed the predictability of the imagery-expressed values to be consistent with the prevailing culture of the countries, as has already been suggested by Marcus and Gould (2000), with the values expressed appearing to be related to collectivism and individualism. Further observation showed that low-context culture websites were richer in text, with fewer animations, heavy images and other effects.

Differences in cultural values in German and Indian web forums formed the context of a study by Pflug (2011), who performed a cross-cultural comparison using Hall's (1992) social measurement of contextuality in CMC (web discussions), to further test its appropriateness for this environment. Through the content analysis of the signs of cultural values manifested therein, it was found that Indians revealed less private information in online exchanges than Germans, and they also used emoticons more extensively, being an expression of the value of non-verbal communication in a high-context culture.

Cultural differences may also inform inclinations towards specific communication media, and thus may deter widespread collaboration between nations. Yang et al. (2011) conducted a large-scale empirical study on cultural differences in social interactions through CMC tools in a giant global company. They found significant differences in the results, with distinctive inclinations and styles when using CMC tools in organisational communications that can reveal their cultural characteristics, showing overall consistency with the cultural characteristics proposed by cultural theories. Relating this to the comparison of high-context and low-context cultures, individuals in high-context cultures were clearly different from individuals in low-context cultures in social contacts (in terms of communication regularity, chosen CMC tools and sentiment styles). Individuals of high-context cultures incline to form smaller but more intensive social networks, choose instant messaging, express less emotion and use different CMC tools regarding their social and hierarchical relationships. Users of low-context cultures form bigger social networks and communicate with others more equally, choose to arrange their meetings, and express less emotions in the context.

Exploring the causes of these cultural differences in communication, Uyanne and Oti (2012), in an article on the influence of cultural backgrounds on communication, showed how fundamental values shape communication. Their field study demonstrated the importance of the interaction of factors already mentioned, such as high or low context, individualistic/ collectivistic, and high or low power distance, which can influence interaction in ways that may be felt but not fully understood. These intercultural skills can be divided into "four dimensions: motivation and attitude, tolerance for ambiguity, open-mindedness, and knowledge and skill" (Uyanne & Oti, 2012, p.246).

Hall's (1976) concept of culture, which includes dimensions of high/low context, time, and space orientation, was first applied to CMC by Holtbrugge, Weldon and Rogers (2012), who studied email styles to detect if crosswise style shifts over cultures could be explained by Hall's theory. The study showed that cultural differences in email do exist according to the theory, and that email communication styles are culturally bound, especially in relation to formality, promptness, precision, task-relatedness and relationship relatedness in email communication.

To sum up, high-context and low-context cultures may use email communication in different ways, with different amounts of information needed for communication in these two types of culture (Hall, 1976; Pflug, 2011). Communication in low-context cultures (e.g. the UK) is direct, verbal and explicit, whereas communication in high-context cultures (e.g. KSA) is indirect, nonverbal, emotional, formal and implicit (Fujimoto et al., 2007; Pflug, 2011). Cultural diversity in teams may therefore cause misunderstandings or misinterpretation of messages (Kayworth & Leidner, 2002). Using CMC may also increase negative behaviour and reduce trust and efficiency among online communicators (Workman et al., 2003). The same email message can be interpreted in different ways by different people, for example the length of the message can be seen as either a positive or negative emotional cue (Cheshin, Rafaeli & Bos, 2011). Therefore, the cultural backgrounds of the readers may affect their reactions, even in simple responses such as to the length of messages.

Understanding the cultural context and the language context of other countries can therefore improve intercultural communication (Fujimoto et al., 2007). However, it can be argued that not all communication in low-context cultures is direct, verbal, and explicit, nor is all communication in high-context cultures indirect, nonverbal and formal.

"Naturally, high-context communication can occur in a low-context culture.

Communication within a family or close-knit group is high context in almost any part of

the world. Conversely, low-context communication is becoming more common in high-context cultures, due to Western influences and a desire to accommodate travellers and expatriates" (Hooker, 2012, p. 390).

Cardon (2008) criticized Hall's (1976) concept of contexting on the basis that it was not based on empirical research, and the existing research also did not include any valid measure of contexting. Moreover, subsequent research has challenged the contexting theory, particularly the established relationship between directness and the two categories (low context and high context), which has not been supported by empirical research. Furthermore, previous research in contexting has not examined an adequate number of cultures to detect their differences.

This research did not measure high/low context, but it assumes that collectivist cultures such as KSA tend to be high context while individualist ones such as the UK are more prone to low context (Wurtz, 2006). However, separate effects of collectivism and high context cannot be statistically disentangled as contextuality was not measured. There may be a need for studies to establish if there are significant links among Hofstede's (1980, 2001) cultural dimensions and low/high context communication, otherwise researchers must resort to such assumptions.

#### **2.5.8 Theme 8: The Influence of Cultural Background on Emotional Reactions**

There are clearly differences between individualistic and collectivistic cultures regarding emotional reactions. Eid and Diener (2001) explored this issue in their study to test the effect of norms, including inter- and intra-national norms and their emotional bonds in society, and also to understand the effect of cultural norms and norm differences between individualistic and collectivistic nations. Results showed that there were both common and cultural-specific types of norms in experiencing certain emotions, with robust international variability in norms for emotion, mainly related to collectivistic countries. The unexpected discovery was that individualistic countries had the least variations in norms, specifically with respect to the emotion of pleasure, while it emerged from comparison between respondents from individualistic countries (e.g. the USA and Australia) and collectivistic ones (e.g. China and Taiwan) that individualistic countries were the most uniform in the norms for this particular emotion. The strongest difference between them was in norms for self-reflective emotions (e.g. pride and guilt), and there were also strong national contrasts in reported emotional encounters, even when norms were held to be consistent.



Differences between individualistic and collectivistic countries also have an impact on the expression of emotions. Matsumoto et al. (2008) looked at emotional display rules in relation to individualism versus collectivism. More than 5,000 respondents in 32 countries completed the Display Rule Assessment Inventory which were then examined the relationship between display rules and individualism-collectivism (IC). Results demonstrated that there are several common effects, including strong expression toward in-groups compared to out-groups, and the rule effect, showing that individualistic and collectivistic cultures vary in display and in norms regarding precise emotions in in-group and out-group conditions. Individuals of individualistic cultures express relatively less negative emotions to out-group members compared to in-group members. Individuals of individualistic cultures express more happiness and surprise to out-group members in comparison to in-group members.

The connection of emotions with cultural values was explored by Taras, Kirkman and Steel (2010), who reviewed the impact of culture in many countries in the world over a period of three decades. The review focused on Hofstede's (1980) cultural value dimensions. The power of the cultural values was considerably lower than the power of personality traits and demographics for certain outcomes, and was substantially higher for others, such as outcomes for managers, males, older and more educated participants, and some organisational and employee outcomes. Cultural values had the strongest relationship with emotions, followed by attitudes, behaviour, and finally job performance, indicating the significance of emotions when exploring cultural differences.

To summarise, it is clear that different cultural norms can influence the experience of different emotions, resulting in certain emotions being appropriate in some situations and inappropriate in others (Eid & Diener, 2001). According to Frijda and Mesquita (1995), three features of emotion are influenced by culture: the expression of emotions, the experience of different emotions, and the social effects of emotions. For example, individualists are more likely to express disgust and sadness to in-group members, as they are linked to norms that lead individuals to have less negative emotions with out-group members, whilst collectivists tend to express anger to out-group members, because collectivistic cultures may be linked to norms that guide individuals to display less negative emotions towards in-group members; therefore, according to individualistic norms, the out-group should be treated in the same way as in-group members (Matsumoto, 1990; Matsumoto, Yoo & Fontaine, 2008).

In line with these tendencies, collectivists appear to have greater consistency and commitment to the in-group than do individualists (Hui, Triandis & Yee, 1991) and may also be linked to norms that intensify in-group identity by increasing the distance between in-group and out-group, resulting in less positive emotions and more negative emotions toward the latter (Matsumoto, Yoo & Fontaine, 2008). Collectivists and higher power distance individuals may therefore react more negatively towards an email sender who is an out-group member (e.g. with a different status or different culture) than to one who is an in-group member (e.g. with the same status or the same culture). High power-distance individuals, for instance, consider anger to be more appropriate when directed at individuals who are lower in status (Koopmann-Holm & Matsumoto, 2011).

These cultural norms for experiencing emotions can be derived from cultural differences in self-construal, which may be categorised as independent, or interdependent (Eid & Diener, 2001). Individualistic cultures represent people with an independent self. In contrast, people with an interdependent self can be found in collectivistic cultures. Individualists tend to focus on their characters, potentials and desires, whereas collectivists focus on social relationships controlled by emotions, perceptions and other people's behaviour (Eid & Diener, 2001). Furthermore, individualists are generally promotion-focused, meaning that they are more focused on achieving their own goals and desires, whereas collectivists are prevention-focused, implying that they are more focused on avoiding social-norm violations. Moreover, in their cross-cultural comparison study between the USA and Australia as individualistic countries, and China and Taiwan as collectivistic countries, Eid and Diener (2001) concluded that self-conscious emotions, which may arise due to violating social norms such as guilt (prevention-focused), are highly important in collectivistic cultures, whereas pride (promotion-focused) was considered a more important emotion by individualists. These differences in self-construal and self-consciousness may be related to norms for the experience of emotions (Eid & Diener, 2001).

Thus, it is evident that the different cultural norms of the email recipient may cause different emotional and behavioural reactions to violations perceived in email messages. In the current study, the email sender's cultural background was manipulated by prior information suggesting that the email sender was from the same or a different cultural background; it would be expected that the individuals from both cultural backgrounds (the UK and KSA) would vary in their affective and behavioural reactions according to the information they received about the cultural background of the sender. The present research attempts to understand cross-cultural emotional and behavioural

reactions to email norm violation by gaining insight into and adding to our knowledge on UK and Saudi differences in perception and reaction to email norm violation in various sectors. The framework should also acknowledge that even within cultures such as the UK and KSA, the workforce is multi-cultural, particularly in health care, and increasingly so in higher education and business.

#### **2.5.9 Questions Not Addressed by Previous Studies**

The effect of social norms and the salience of group identification on reactions to email messages that violate communication norms (e.g. spelling mistakes and breach of email etiquette) has been addressed by several authors, and can be explained by social identity theory (Tajfel & Turner, 1979), self-categorisation theory (Turner et al., 1987), and the SIDE model (Reicher et al., 1995). Regarding the impact of norm violations on emotional and behavioural reactions of the email recipient, this issue has been addressed by appraisal theory and intergroup emotions theory (Frijda, 1986; Mackie et al., 2000). Further effects on the receiver's emotional and behavioural reactions to norm violation in electronic communication have been attributed to the diversity of cultural backgrounds (individualism and collectivism, and high or low power distance) (Hofstede, 1980). It follows, then, that electronic communication, just like verbal communication can clearly be controlled by norms and the experience of emotions (Eid & Diener, 2001). Additionally, previous studies have shown that an individual's reactions to perceived communication norms violation in an email message may be moderated by social information provided about the sender (e.g. cultural background and work status), which can influence their perception of the sender as an in-group/out-group member (Cramton, Orvis & Wilson, 2007; Jessmer & Anderson, 2001; McGoldrick, 2011; Stephens, Houser & Cowan, 2009; Vignovic & Thompson, 2010). However, no previous studies have examined the interaction effect of the email sender's cultural background and work status, and the recipient's country of residence or cultural background, such as with regard to collectivism and power distance (Hofstede, 2001).

The present study has addressed a number of important gaps that the researcher identified during an in-depth review of the literature review on this topic.

As mentioned previously, Vignovic and Thompson (2010) were the first researchers to examine the moderating role of an email sender's cultural background (same or different) on the perception of the sender, however they failed to examine the cultural background of the recipient, which influences their attributions and reactions. Therefore, the present study has included the culture of

both the sender and the recipient. Furthermore, McGoldrick (2011) completed an unpublished master's thesis in this area that referenced Vignovic and Thompson (2010), but it was limited to testing only the moderating role of work status (i.e. higher, lower), and not the cultural background. It is important to test the interaction of these variables, as well as the potential moderating and mediating factors of the recipient, which may influence their reactions to perceived email violation. Given this gap, previous studies have limited utility in applying their findings to organisational life in complex, multi-cultural, multidisciplinary organisations. The present study addresses this gap by employing a 2 (culture: same/different) x 3 (work status: same/higher/lower) experimental design to test the interaction of both sender's work status and culture.

Given the need to test these interactions in different cultural dimensions, Hofstede's concept of collectivism/individualism has also been measured in this study to determine if collectivist cultures react differently (i.e. more strongly) to the perceived email violation; this key cultural dimension was overlooked by Vignovic and Thompson (2010). Related to collectivism/individualism, the concept of power distance as proposed by Hofstede (1980, 2001) was not considered by Vignovic and Thompson (2010) or McGoldrick (2011). As explained previously, power distance refers to the level of equality between leaders and followers. In some cultures, there is a low power distance (i.e. more expected equality/accountability between leader/follower, less hierarchical power structure), as in the UK, whereas in other cultures there is a high power distance (i.e. less expected equality/accountability between leader/follower, more hierarchical power structure). The concept of power distance is related to both work status and cultural background, but was overlooked by Vignovic and Thompson (2010) and McGoldrick (2011). To address this gap, power distance has been measured, in order to assess its moderating effect on reactions to perceived violation.

Both Vignovic and Thompson (2010) and McGoldrick (2011) were in-country studies, conducted in the USA, and the UK (respectively), therefore they failed to consider that cross-culturally, the moderating role of status and culture may vary between countries, not just 'cultures'. Therefore, the present study has adopted a cross-cultural design to test the conceptual model in both the UK and KSA, separately. These two countries were considered to be appropriate, as theoretically they represent individualistic/lower power distance, and collectivist/higher power distance countries, therefore the reactions may differ among UK and KSA participants.

Moreover, the studies of both Vignovic and Thompson (2010) and McGoldrick (2011) were single-centre studies conducted in university samples (students and lecturers), for convenience of access,

which they both mentioned as a limitation for external validity. To address this limitation, Study 1 significantly expands the scope of this research to cover different professional sectors, namely higher education (lecturers and students) and healthcare (doctors and nurses), in both the UK and KSA. Including a higher education sample in Study 1 allowed replication of previous research by McGoldrick (2011) (Figure 2.2), while addressing its gaps. The selection of lecturer/student and doctor/nurse dyads was not chosen based on evidence from the literature on differences between healthcare and higher education reactions towards email norms violation, as there is no published literature on this topic. Rather, the researcher was interested to investigate the moderating effect of recipients' status on reactions towards email violation, and looked to find organizational sectors to find strong status differences within their professional groups. It is widely acknowledged that strong objective status differences exist worldwide between nurses and doctors and between students and lecturers.

Doctors are highly paid and make key clinical decisions, whereas nurses receive relatively low remuneration and have extremely limited decision-making power. In society, both groups are treated very differently as a result of these status differences. Another example of strong status differences is the relationship between lecturer and student. It is a difference related to their power. Lecturers are paid professionals, who have status accorded by their advanced educational qualifications and their ability to accept and pass or fail a student. In contrast, students generally have no professional status in universities, and are quite a vulnerable group in power terms. It is widely acknowledged that students tend to look up to and sometimes idolize or fear their lecturers as 'experts'.

Although there are possible expected differences between samples drawn from higher education (lecturers and students) and healthcare (doctors and nurses) contexts in their perception of work status and how each group considers the other, the decision to include healthcare was also to try and replicate the higher education study in another sector to establish if hypothesised relationships in the research model are universal across the two organisational sectors.

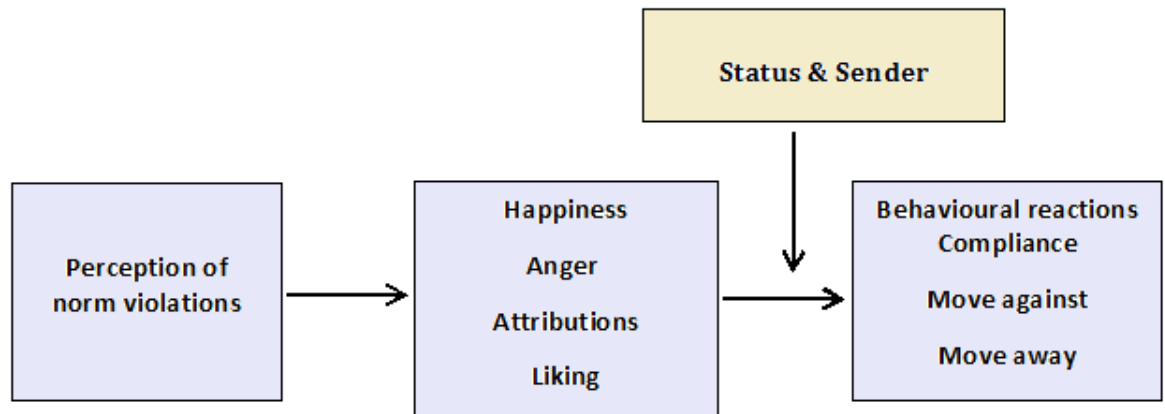


Figure 2.2: McGoldrick's (2011) model, forming the basis of Study 1 of this thesis

As the important concepts of the mediating role of emotional reactions, liking, and attributions to perceived email violation were only tested for a small sample at a single-centre setting in the UK (McGoldrick, 2011), conclusions cannot be drawn about how these mediators may influence participants' reactions in other groups, cultures and countries, thus representing another gap in the literature.

Given that email has been the dominant form of nonverbal communication in Western organisational life for over 20 years, and for nearly a decade in Saudi Arabia, and given the risk of email norm violations, it is surprising that no previous study has identified the above gaps in our knowledge, or formulated a conceptual model to test all of the direct and indirect relationships. It is worth mentioning that further gaps in knowledge related to the factors which influence reactions to email norm violation also arose during Study 1, which later informed the design for Study 2. Figure 2.3 shows the conceptual relationships that the current author has developed from McGoldrick's (2011) model, which tested the mediation effect of emotional responses and the moderation effect of status between emotional responses and behavioural reactions.

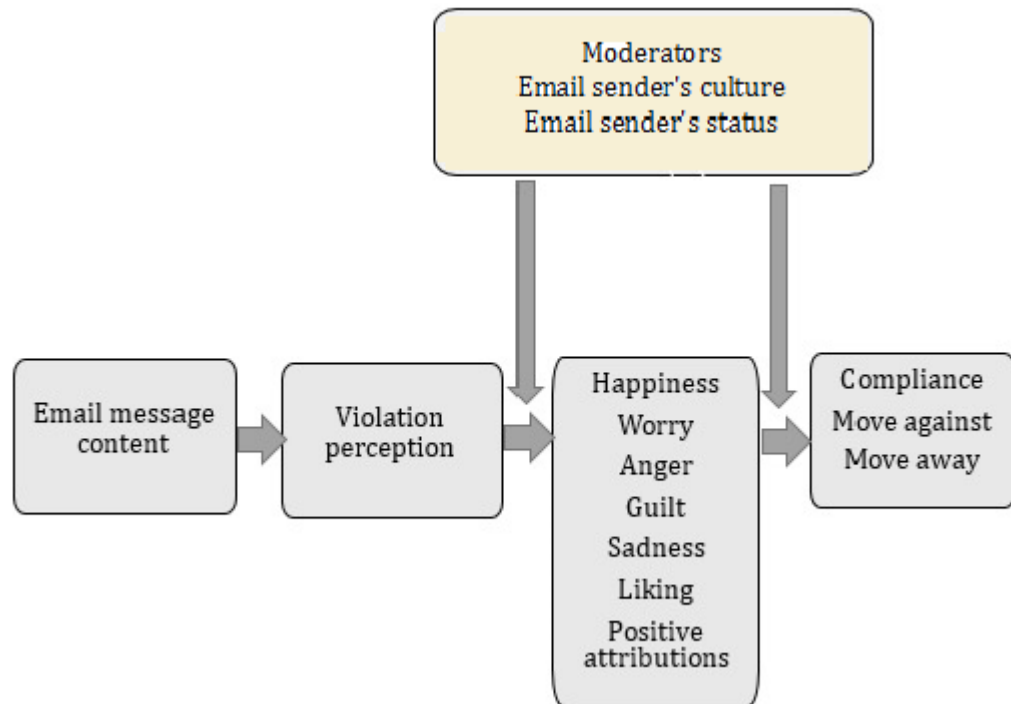


Figure 2.3: Conceptual model of the hypothesised relationships tested in Study 1

## 2.6 Study 1 Research Questions

The research questions can be summarised as following:

1. Does **cultural background** of the sender (same/different) moderate the impact of recipients' level of perceived email violation on their emotional reactions, and also moderate the influence of their emotional reactions on their behavioural reactions towards the email sender?
2. Does **work status** (higher/lower/same) of the sender moderate the impact of recipients' level of perceived email violation on their emotional reactions, and also moderate the influence of their emotional reactions on their behavioural reactions towards the email sender?
3. Are email recipients' behavioural reactions to norm violations in email communication mediated by the recipients' attributions and emotional reactions (i.e. liking, happiness, anger, sadness, guilt, or worry)?

### 2.6.1 Study 1 – Hypotheses

Given the above mentioned model and empirical research, the cultural background and work status of the email sender factors affecting group identity and attributions are proposed to be determinants of the email recipient's emotional and behavioural reactions to perceived norms

violation in email communication. Hence, the moderating variables shown in Table 2.1 were used to formulate the hypotheses explained below to extend previous research.

*Table 2.1: Main topics of Study 1 hypotheses*

<i>Moderating Variables</i>		<i>Hypotheses</i>
1	Sender's culture	H1
2	Sender's status	H2
	Receiver's status	
3	Sender's culture * Sender's status	H3
4	Receiver's culture	H4

*H1: Moderating Effect of Sender's Culture:* Participants would show a more negative affective response, make more negative attributions, and show a more negative behavioural response when the email sender is of the same culture, than when the email sender is of a different culture.

*H2: Moderating Effect of Sender's Status:* Participants would show a more negative affective response, make more negative attributions, and show a more negative behavioural response when the email sender has a different status to the recipient, than when the sender has the same status as the recipient.

*H3: Interaction Effect of Sender's Culture and Status:* Participants would make more negative attributions (H3a), show a more negative affective response (H3b), and show a more negative behavioural reaction (H3c), when the sender has a different status and the same culture than when the sender has the same status and different culture.

*H4: Collectivism/Individualism and Power-Distance:* Higher collectivism and higher power-distance participants would react more strongly in terms of affective responses, attributions, and behavioural reactions, than lower collectivism and lower power-distance (UK) participants.

Having reviewed the literature for Study 1, it is also important to consider the impact of additional variables within the international business sector in this study. The following section presents the literature pertaining to Study 2.

## **2.6.2 Theme 9: Global Identity Influences Email Communication**

Globalisation is the most pervasive development affecting the modern workplace (Arnett, 2002), and is undoubtedly the key element now driving the business world. Furthermore, with the increase in economic, political, ecological, demographic and military interconnections, facilitated by technology (including email) and the consequent reduction in physical barriers and state boundaries facilitating the borderless and seamless exchange of labour, commodities and



information around the world in real time (Hermans & Dimaggio, 2007), members of contemporary organisations are the greatest witnesses of the growing impact of globalization on the formation of identity and the self. This has significant implications for social identity theory, which was developed pre-internet and pre-globalization, and which has since been updated somewhat via the SIDE model.

The global environment is viewed by some as a new impersonal collective entity with implications for personal identity and online communication (Erez & Gati, 2004). Scholte (2005) contended that globalisation has ensured that identity and nation states are no longer restrained by space and time. Being global to an individual means having the perception of belonging to a global culture, particularly through the adoption of particular practices and styles related to the global culture (Arnett, 2002; Erez & Gati, 2004) and having the potential for a stronger global identity leading to more shared norms and values among individuals (Glikson & Erez, 2013).

In contrast, local identity, which can be defined as belonging to or identification with the national community in which an individual was born and grew up (Drori, Hollerer & Walganbach, 2014) can result in perceiving team members of the same culture as the in-group and those of different cultures as the out-group (Shokef & Erez, 2006). Multicultural virtual teams are a key component of today's globalised organisations, and Erez et al. (2013) highlighted the importance of global identity as a global characteristic, which facilitates adaptation to the global work context, and has an impact on the behaviour of individuals in culturally diverse situations and communications. People's experience of working in a multicultural environment may also reduce the effect of group categorisation (in-group and out-group membership) and as a consequence increase global identity among team members (Arnett, 2002; Erez et al., 2013). This may have an impact on online communication with a dependence on email communication for effective collaboration. However, the ability to communicate effectively can depend on the similarities between the two cultures of sender/receiver, and whether the global culture can blend into their local culture (Erez & Gati, 2004).

Arnett (2002) pointed out that global culture has emerged mainly as a result of Western culture increasingly coming into contact with other cultures, with urban areas more influenced by globalisation than rural areas, typically resulting in conflict between the values of the global culture (predominantly a homogenized Western paradigm) and local cultures. Consequently, some individuals in non-Western countries, especially young people, may develop a global identity

alongside their local culture. Another consequence of globalisation is that identity tends to be based on individual choice rather than on social roles, resulting in the development of a bicultural identity, which combines their local identity with the global culture. In addition, local culture is clearly changing as a result of globalisation. This global identity results in people communicating with others from different parts of the world when travelling and through media technology (e.g. email) (Arnett, 2002). Developing these ideas further, Sassen (2003) on the denationalisation of identity and citizenship suggested that globalisation has in fact reconfigured the actual notion of identity and rendered it a changed institution, thus altering the very meaning of the word 'national', which means that the definition of identity within that nation has also changed, even if it is situated within traditional territorial borders.

Global culture has also been found to have an effect on identity and adjustment in the workplace. Erez and Gati (2004) studied a multi-level model of culture from the individual level to the global level. This study was conducted to propose a multi-level model that addresses the dynamic and changing nature of culture, based specifically on the suggestion that globalisation, as a large-scale level of culture, causes behavioural changes of individuals in different cultures. The study requires a shift from concentration on culture as being in a steady form to culture as a dynamic substance, with a more detailed exploration of the interchange between diverse levels of culture. The influence of global culture on layered levels of culture can be eased or delayed by the specific characteristics of national culture. The impact of global culture on identity is not only through its influence on national culture, but also through its direct influence on the individual's experience in the global workplace.

The effects of working in multicultural groups was explored by Erez et al. (2013), who explored whether it was possible to promote a global identity and cultural intelligence in team members through their involvement in a virtual multicultural group. The researchers demonstrated that global training projects, which involved working in multicultural groups, can enhance an individual's global identity and cultural intelligence and form a trusting relationship with others. This change in an individual's global identity and cultural intelligence can help form a strong and enduringly significant relationship of trust with others across distinctive samples and for a long time after the end of the project.

The effects of identity within virtual teams were also examined by Glikson and Erez (2013), this time focusing on emotion display norms. Results show that display norms cause more expression

of positive emotions and suppression of negative feelings in a multicultural team compared to a culturally homogeneous group, and that national identity impacts norms in a culturally homogeneous group but not in a multicultural group. Also, individuals with high global identity had stronger norms than those with low global identity within multicultural teams. The results are limited by the fact that the researchers utilised a sample consisting of MBA students only, even though they were from five nations.

The impact of local and global identity on categorising individuals from the same culture as the in-group and individuals from other cultures as the out-group has been explored by several authors. According to Shokef and Erez (2006), this factor is caused by local identity intensifying the acceptance of local truths, with the result that local identity may negatively influence reactions to out-group members. Fitzsimmons (2013) studied how multicultural employees contribute to organisations, attributing the categorisation of in- and out-groups to the consequence of a transformed social identity reflecting the increased number of multicultural employees identified with two or more cultures in the workplace, because of factors such as immigration, long-term migration, and intercultural marriages. Such employees may present challenges for organisations and cause further complexities in employees' behaviours and actions.

To summarise, although Adams (2004) posits that globalisation has resulted in increased uncertainty amongst individuals, leading to feelings of tension and anxiety that they try to reduce by referring back to their local cultures for safety and certainty, other studies show that global identity has a positive impact on people's behaviour, working in multicultural teams with trust and positive emotions. Fitzsimmons (2013) concluded that organisational identification and cultural ideology moderate relationships among multi-cultural identity patterns and outcomes. Global identity may, in fact, enhance the acceptance of cultural diversity, which may in turn facilitate trust, collaboration and belonging (Glikson & Erez, 2013; Shokef & Erez, 2006, 2008). One way of enhancing an individual's global identity can be provided by global training projects, which involve working in multicultural groups (Erez et al., 2013).

Erez and Gati (2004) suggested that global culture forms the most macro level of culture in the multi-level model. Because cultural diversity in the global work place is varied, organisations need to offer recognition of cultural differences, and to respect cultural multiplicity. To achieve this, the establishment of interdependent teams allows organisations to link together geographical and cultural differences, which guarantee successful communication and harmonisation across multiple

companies. Regarding the readiness to accept global culture, Harzing and Hofstede (1996) indicated that collectivism, high power distance and uncertainty avoidance may reduce the acceptance of change, whilst individualism, low power distance and uncertainty avoidance raise such acceptance, including with regard to global cultures (Erez & Gati, 2004). Shokef and Erez (2006) pointed out that local identity enhances the acceptance of cultural truths, leading to the classification of individuals of the same culture as in-group and individuals of other cultures as out-group, with local identity possibly negatively influencing reactions to out-group members. According to the social identity theory, there may also be a bias in favour of a sender who is from the same culture.

Global identity and globalisation, as Hermans and Dimaggio (2007) indicated, are a cocktail of multiple diverse cultures coming together with high levels of established cultural tolerance. Global identity is heterogeneous, different and culturally diverse, as opposed to culture, which is homogenous (Meyer & Geschiere, 1999); as a result, individuals may have multi-cultural identities. Likewise, social identity indicates that an individual may have several social identities depending on the perception of group membership (Hogg & Vaughan, 2002).

To conclude, global identity may have an impact on emotional and behavioural reactions to norm violations in email communication. The reactions of individuals with high global identity may be distinct from others with low global identity. Global identity may also interact with different aspects such as status and culture. Moreover, culture is homogenous, uniform and can be associated with cultural imperialism, whereas global identity is multifaceted and can be one of choice. Global identity can have a moderating effect on the display of positive emotions but violations of any of the norms in communication may trigger a stronger emotional or behavioural reaction in an individual with a lower global identity (Glikson & Erez, 2013).

### **2.6.3 Theme 10: The Influence of Personality Traits on Email Communication**

Personality traits have been defined by Markus and Kitayama (1998) as comparatively stable or noticeable variations in feelings, thoughts and behaviour between individuals, that remain relatively stable over longer periods of time (McCrae & Costa, 1994) and are usually regarded as stable patterns of behaviour that are embedded in a wide variety of situations (Plutchik, 1997). They are key latent characteristics that distinguish one individual from another, in terms of their typical and therefore predictable behaviours. These stable patterns of behavioural interaction and thinking

have the general task of using, managing and adapting to external forces and produce predictable responses from individuals in different situations.

The most common measure of personality in organisational psychology is the Big Five traits (extraversion, emotional stability, agreeableness, conscientiousness, and openness to experience), which may manifest themselves differently in each individual (McCrae & John, 1992). Extraversion and emotional stability tend to be the most widely measured/relevant traits for organisations, with higher extraversion and high emotional stability being associated with better performance in Western organisations, as individuals high in these traits tend to be confident and effective in communication with others, and in managing stress. In addition, extraverts tend to show positive emotions, assertiveness, and a high level of energy, are usually talkative, emotionally expressive and lively, but may also be more distractible and need stimulation from their environment, with a high interest in the outside world and events, and in social interaction with larger groups. Extraverts may also form relationships easily and tend to have many friends (Jacques et al., 2009). Introverts, in contrast, tend to be more reserved, and more interested in their internal world of thoughts and feelings than in external events and people, and prefer one-to-one/smaller group communication (McCrae, 2002; Trapmann et al., 2007).

Moreover, individuals with low emotional stability (neurotic people) are said to be overly concerned with details, tend to have negative emotions, to be tense and moody, and to worry more than others (Jacques et al., 2009). McCrae (2002) suggested that individuals are likely to be anxious and depressed when they have high neuroticism, whereas people who have low neuroticism are likely to be calm and emotionally stable. The trait of agreeableness is said to belong to an individual who helps, forgives and tends to trust others quickly (Jacques et al., 2009), a person who is flexible, tolerant, cooperative, kind to other individuals, modest and compliant (Trapmann et al., 2007). Furthermore, conscientious people are considered to be reliable, determined and to work in an organised way to achieve tasks (Jacques et al., 2009). According to McCrae (2002), conscientiousness implies punctuality and purposefulness within organisations. Finally, open people are usually inventive and enjoy trying out new activities (Jacques et al., 2009), and possess the qualities of imagination, creativity, curiosity, originality and artistic sensibility (Trapmann et al., 2007).

Hertel et al. (2008) highlighted the particular significance of the traits of extraversion and neuroticism, based on examination of the effects of personality on communication media

preferences in threatening and non-threatening situations. The results showed that extraversion and neuroticism significantly predicted the preferences of media (face-to-face or email), with extraverts preferring face-to-face or telephone communication, and those high on neuroticism preferring emails. In addition, it was found that personality traits were related to preferences for specific methods of communication, rather than preferences to communicate, and that the motivational manifestations of personality traits in social situations, such as social skills and social anxiety, were found to mediate the impact of these traits. However, as the study was centred on only two forms of communication media, rather than investigating others, such as the telephone, fax, and feature conferencing, it is limited in scope.

The impact of the Big Five traits was also investigated by Zhou and Lu (2011) in their exploration of the relationship of these traits with two significant factors found to lead to user adoption of mobile commerce, namely trust and perception of usefulness. The results showed that although all these traits significantly influence trust, only agreeableness and neuroticism significantly influence the perception of usefulness, which causes the adoption of mobile commerce. Agreeable users positively perceive mobile commerce usefulness and neurotic users negatively perceive the usefulness of mobile services. In order to generalize the results, however this still needs to be tested in other countries on older users, rather than on only young users, particularly with regard to developed mobile commerce.

Other studies have focused on the impact of personality traits on issues such as information and knowledge sharing. Tidwell and Sias (2005) completed an assessment of how personality traits affect the process of socialising among organisational newcomers (before they become 'organisational experts'). The results demonstrated that certain personality traits have a direct or indirect impact on information seeking. For example, a direct relationship was identified between extraversion and information seeking. This relationship was mediated by perceived relational social costs.

Regarding the impact of personality traits on knowledge sharing, Jadin et al. (2013) carried out a study using a sample of Wikipedia users with an additional three traits to the Big Five, namely personality, motivation, and knowledge sharing, to predict the level of knowledge sharing in an online community. The findings indicated that the writing of Wikipedia is linked with higher innovative and social value tendencies, and is moderated by the level of individuals' motivation to write.

In addition, Barlett and Anderson (2012) examined the extent to which the medium of email intensifies the aggressiveness of opening offers made by negotiators from the two distinct cultures, of Hong Kong and the US. The results indicated that Hong Kong Chinese negotiators made more aggressive opening offers and achieved greater distributive results than their US partners, while the results showed favourable outcomes for Hong Kong email negotiators compared to face-to-face negotiators in both Hong Kong and the US. The findings indicated that negotiators from these two countries differ from each other in the way they negotiate through email or face-to-face communication. Agreeableness was negatively associated with aggressive behaviour mediated by aggressive emotions and attitudes. Neuroticism was positively associated with aggressive behaviour and physical aggression. The study may support the hypothesis of this research that neuroticism may enhance negative reactions to email norm violations. However, this study had a relatively small sample size among undergraduate students, which may limit the generalizability of the findings.

A further study which explores the different effects of personality traits on virtual versus face-to-face communication is the examination of the impact of 3D virtual worlds and face-to-face communications (FtFCs) on an individual's communication experience (Hammick & Lee, 2014). The outcomes showed that shy people felt less communication apprehension (fear) in online discussions than in FtF discussion, and that, in contrast to virtual communication, FtFCs were a more effective communication channel in affecting people's likelihood to modify behaviour. The results suggested that the absence of visual/auditory cues in virtual environments was the main aspect influencing the outcomes.

DeNeve and Cooper (1998) performed a meta-analysis to explore personality traits in correlation with subjective well-being (SWB). Although it must be borne in mind that some demographic variables such as health and socioeconomic status (SES) also have an effect, the results indicated that personality traits can predict life satisfaction, happiness and positive affect, with traits such as "repressive-defensiveness, trust, emotional stability, locus of control-chance, desire for control, hardiness, positive affectivity, private collective self-esteem and tension" found to be the features most associated with subjective well-being (DeNeve & Cooper, 1998, p.197). Interestingly, it was found that neuroticism is the strongest predictor of happiness, life satisfaction and negative affects, but extraversion and agreeableness were found to predict positive affects. The study indicates that negative personality traits such as neuroticism can enhance negative reactions and positive traits

such as extraversion, while emotional stability may increase positive reactions in email communication.

A further study by Bakker et al. (2002) aimed to explore the positive effects of these traits on burnout in volunteer social service work. It was found that neuroticism exclusively predicts emotional exhaustion, and that emotional stability along with extraversion predicts personal accomplishment. Furthermore, there are some additional personality factors which moderate the relationship between negative experiences and burnout, thus suggesting that personality traits may prevent the risks of increasing burnout in volunteer social service work. The study emphasised the crucial influence of both extraversion and emotional stability on increasing or reducing negative emotions and behaviours, which is proposed by this research in regard to email communication. Previous work by Hills and Norvell (1991) found that neuroticism was highly related to burnout, and it moderated the detrimental impact of daily problems and troubles.

Extraversion, positive emotions, and the pursuit of enjoyment have been found to be positively associated with performance ratings in jobs involving social communication (Jacques et al., 2009), as opposed to neuroticism, which can be said to be focused on psychoticism, distress and negative emotional and behavioural reactions, such as emotional sadness and aggression. Furthermore, Kotov et al. (2010), in a meta-analysis on the link between these Big Five personality traits and certain disorders such as anxiety, depression and substance use found positive relationships between neuroticism and introversion and anxiety.

Cross-cultural factors clearly impinge on personal traits, and this concept has been effectively used to predict and understand behaviour across cultures, being central to Western personality psychology (Church, 2000). Research by Costa et al. (2001) in the Philippines found clear evidence that Filipinos showed distinctive traits that guided their behaviour, for instance making trait distinctions specific to their language or culture. In addition, Hofstede and McCrae (2004) aimed to link personality traits with nine dimensions of culture, and in Hofstede's (1980) classic IBM study he noted that personality traits and cultural values from 33 nations were significantly related to cultural dimensions. In addition, McCrae et al. (2005) investigated the personality profiles of different cultures and concluded that aggregate personality profiles can provide insight into cultural differences, as the findings support the rough scalar equivalence of NEO PI-R (Neuroticism, Extraversion, Openness Personality Inventory-Revised) factors and facets across cultures. Another finding from studies carried out in this context is that extraverts were discovered to be more open to



accepting new cultures through their increased interactions with individuals from different milieus (Erez et al., 2013).

To summarise, the literature shows that personality traits such as extraversion and emotional stability can contribute significantly to many essential outcomes (e.g. communication, performance, professional achievement, life satisfaction and positive emotions). There have been many studies on the impact of the Big Five personality traits, namely openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, and it has been found that individual differences in these may influence emotional reactions. Extraversion has been linked to a tendency to experience positive emotions, and they may be a basis of positive affects, while neuroticism has been linked to a tendency to experience negative emotions and may cause negative affects (Allik & Realo, 1997; Costa & McCrae, 1980; Watson & Clark, 1992). According to Raad and Kokkonen (2000), neuroticism and extraversion represent basic dimensions of emotional temperament that generally reveal how individuals differ in their tendencies to experience negative or positive emotions (Tellegen, 1985).

Moreover, Vernon et al. (2008) found that high emotional intelligence is associated with high extraversion and low neuroticism. In addition, neuroticism has been found to moderate the negative impact of daily frustrations (Hills & Norvell, 1991), and is said to be positively related to emotional fatigue, anger, hostility and vengefulness, while extraversion is said to be negatively related to these emotions (Francis et al., 2004; McCullough et al., 2001; Sharpe & Desai, 2001; Zellars et al., 2000). Personality traits are significant influential factors, as they have been found to predict outcomes such as burnout, aggressive emotions and behaviours, happiness and subjective well-being, anxiety, depressive and substance use disorder, positive and negative affect, and, importantly, communication and collaboration in virtual teams (Bakker et al., 2002; Barlett & Anderson, 2012; DeNeve & Copper, 1998; Kotov et al., 2010; Nimon & Graham, 2011).

The moderation effects of these personality traits have already been considered in earlier studies. For example, Wanberg and Kammeyer-Mueller (2000) found a moderating relationship between extraversion and monitoring for performance information seeking. Moreover, Chen and Lee (2008), in a study about online shopping, found that personality traits had moderating effects on consumers' beliefs and perceived values on attitude, trust and approach behaviour. This indicates the potential moderating role of the personality traits in online communication, which may support the assumption of this research that personality traits may moderate the reactions to email

communication. Another finding from the literature is that personality traits were considerably related to cultural dimensions. The very function of personality traits as a regulator of social relations makes them relevant and highly valuable factors for the study of norm violations in email communications, as they are direct indicators of how an individual will respond to a violation. Furthermore, the way an email norm violation is perceived and its corresponding positive and negative emotion or behaviour may also depend on whether the individual is an introvert or an extravert. People with personality traits such as high extraversion and high emotional stability may therefore show more positive/less negative emotional and behavioural reactions towards email norm violations.

#### **2.6.4 Theme 11: The Influence of Trust on Email Communication**

Trust is a crucial factor for effective intergroup and intragroup performance (Mockaitis, Rose & Zetting, 2012). It can be defined as “willingness to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer, Davis & Schoorman, 1995, p. 712). Trust can break down geographical barriers between virtual team members and allow proactive collaboration at a global level, facilitating mutual understanding and the willingness to collaborate (Erez et al., 2013; O'Hara-Devereaux & Johansen, 1994).

The existing literature on the notion of trust distinguishes between trust propensity (disposition to trust), trustworthiness and trust. Trustworthiness is referred to as the benevolence, ability and integrity of a trustee, while trust propensity is defined as a dispositional willingness to rely on others, while trust is defined as the intention to accept exposure to trustees based on positive expectations of their actions (Colquitt, Scott & LePine, 2007). Mayer et al. (1995) distinguished between two types of trust: trust as a situational state and trust as a personality factor. Personality-based trust is referred to by other researchers as dispositional trust (Kramer, 1999) or trust propensity (Mayer et al., 1995). Trust propensity is probably the most significant trust antecedent in settings which include individuals who are unfamiliar with each other (Bigley & Pearce, 1998).

Situational trust can also be categorized into individual, team and organisational levels. Trust at the individual level involves interpersonal, team and organisational trust. The interpersonal referent refers to a specific individual or people, such as a leader, a co-worker or a follower (Fulmer & Gelfand, 2012). Moreover, the team referent directs trust in team members, and trust in the team referent is essential because of the reliance on teams in organisations (Kozlowski & Ilgen, 2006). In

addition, the organisation referent indicates trust in the entity of an organisation, which can be defined as "a psychological state comprising willingness to accept vulnerability based on positive expectations of an organisation" (Fulmer & Gelfand, 2012, p.1174). However, situational trust differs from the dispositional trust or propensity to trust (Goldberg, 1999; Mayer et al., 1995; Yamagishi & Yamagishi, 1994), in that the situational trust is focused on a specific target, whereas dispositional trust or propensity to trust is about people in general. Erez et al. (2013) indicated that trust may be an even more important factor in multicultural virtual teams than group identity.

The effects of the propensity to trust of team members were found to be significant by Jarvenpaa, Knoll and Leidner (1998), who aimed to explore the antecedents of trust in a global virtual-team setting. Virtual groups have also been found to be more strongly influenced by the propensity to trust than in face-to-face settings (Yakovleva, Reilly & Werko, 2010). Furthermore, Nimmon and Graham (2011) concluded that where trust is high amongst members of a team, advanced technology is more likely to be selected than face-to-face communication for the discussion of important messages, and in high-stress settings, such as in military combat, personality traits and trust play an extremely important role in virtual team efficiency.

Rotter (1980) suggested that people with a high trust propensity are likely to behave and perform in a more trustworthy, moral and willing way in situations than those with a low trust propensity. Trust propensity has also been found to be linked to high levels of honesty, compliance and offers of help (Rotter, 1971, 1980). Propensity to trust is positively associated with perceptions of people's trustworthiness, ability, kindness and integrity (Mayer et al., 1995). Despite low perceptions of leader trustworthiness, it was found that followers who have high propensity to trust tend to have high trust in leaders (Grant & Sumanth, 2009).

Propensity to trust also plays a major role in sourcing information. Lucassen and Schraagen (2012) looked at propensity to trust and the impact of source and medium cues in trustworthiness estimation. From this they concluded that trust in information is affected by trust in its source, which is in turn impacted by trust in the medium of this source. Propensity to trust has been shown to be an important factor in anticipating consumers' trust in internet shopping (Cheung et al., 2001; Lee & Turban, 2001), again demonstrating that trust in the medium is affected by the propensity to trust of the user.

Ashleigh and Higgs (2012) found a relationship between propensity to trust and both subjective well-being and psychological well-being within a large sample of managers, while Jarvenpaa et al. (2004) reached the conclusion that trust influences virtual teams differently in various situations, and thus in virtual communication, trust is expected to be vital, because collaboration can only be effective if both collaborative teams of individuals trust each other. It was found that members' trust in their team functions as a moderator, indirectly influencing the associations between team communication and the outcomes, thus the creation of trust requires collaboration consisting of serious communication which is frequent enough to offer continuous confirmation that colleagues are still on-task. Therefore, understanding the variables that build and maintain trust is essential in order to ensure effective collaboration.

Further research on collaboration within virtual teams was carried out by Paul and McDaniel (2004), in their examination of the connection between interpersonal trust and virtual collaborative relationship performance. They found a relationship between competence and relational interpersonal trust and performance, strongly supporting an association between trust and virtual collaborative relationship performance.

Communication and trust within globally distributed teams was the focus of a study by Sarker et al. (2011), researching the impact of these factors on member performance. Among the conclusions reached was that trust, referred to as a 'glue' in previous research, plays a prominent role in distributed teams, as it mediates the relationship between communication and performance. Erez et al. (2013) discovered that within the context of global teams, higher levels of trust promote cooperation and allow the capitalization of culturally diverse channels of knowledge, as trust enhances the acceptance of diverse individuals as in-groups, thereby facilitating the emergence of a global identity.

There is no doubt that a climate of trust can have a positive impact on communication within organisations. It has been found to increase job satisfaction, employee identification with the organisation, and to improve cooperative relations and organisational citizenship behaviour (Deery et al., 2006; Montes & Irving, 2008), as well as offering the potential to enhance the sharing and receiving of knowledge between workers (McEvily, Perrone & Zaheer, 2003). Trust in organisations can also moderate the relationship between perceived organisational obligations and organisational citizenship behaviour (Coyle-Shapiro, 2002). Fulmer and Gelfand (2012) reviewed trust levels across multiple organisational levels between 2000 and 2011, implementing a levels-of-

analysis approach to unify their research on trust in various referents, including interpersonal, individual, team and organisational levels. They analysed the similarities and differences in antecedents, consequences and theoretical main viewpoints at each level. Significant benefits of trust for organisations were also supported by Dirks and Ferrin (2001) in a review of empirical studies spanning 40 years, investigating the positive effects of trust on attitudes, perceptions, behaviour and performance within organisational environments. Tan and Tan (2000) investigated the differentiation of trust among supervisors and in organisations. The results showed a positive correlation between trust in supervisor and trust in organisation, indicating that trust in supervisors is related to ability, benevolence and integrity, and that organisational support and justice encourage organisational trust. However, the study is limited by the self-report nature of this case, which might lead to variance due to the nature of diversified variables.

To summarise, from the previous literature, trust has also been found to have a positive effect on communication, online collaboration and performance within organisations. It was also found that trust has either mediating or moderating effect, an issue which has been studied extensively, but not yet specifically in relation to reactions to electronic communication. For example, trust has been found to have a moderating effect on attitudes and performance (Panteli & Tucker, 2009), which may also be moderated by perceived leader trustworthiness (Grant & Sumanth, 2009). In addition, interpersonal trust can moderate the relationship between a positive affect environment and workers' productivity and task performance (Menges et al., 2011). Moreover, trust moderates the relationships of communication and attitudes with the task value perception (Dirks & Ferrin, 2001). Zeffane, Tipu and Ryan (2011) found that commitment and trust do not just occur, but are built and maintained via effective communication. However, once such trust is forged, it will affect how individuals behave in their interaction with someone who is high on their trust agenda and someone with lower trust.

Regarding teams, Jarvenpaa et al. (2004) found that the trust of a member in his team functions as a moderator, indirectly influencing the associations between team communication and outcomes. In a study of the communication role and trust in global virtual teams, Sarker et al. (2011) found that the moderation model revealed that the interaction of trust and communication had a significant influence on performance. A further moderating effect of trust is that of its influence on online consumption behaviour and the use of the internet (Roy & Ghose, 2005). This was explored in a study by Sharma (2008) looking at the relationship between dogmatism and the tendency for online

consumption, in which he found that trust in e-tailer and the value of the exchange outcome both had a moderating role. Sanzo et al. (2011) also proposed a model expecting a positive moderating effect of trust on the relationship between organisational learning and the development of marketing competences.

The role of trust in building virtual teams and its increasing impact on communication (including email communication) in today's organisations cannot be underestimated. Trust is essential to interpersonal relations in the global workplace, reducing emotional conflicts in teams, among other impacts (O'Hara-Deveraux & Johansen, 1994). Trust is perceived to be of greater importance when there is uncertainty in relation to the fitness of another's intentions and future action patterns, and where the interest of one individual cannot be met without relying on another party.

As a result, in email receivers with a higher dispositional trust and organisational trust there may be fewer negative behavioural responses to norm violations in email communication, than in those with lower trust. Thus, intensity and levels of trust may affect behaviour within email communication, both positively and negatively, regardless of whether the individuals are culturally uniform, share the same status or the same identity. Hence, any study of email communication, using factors such as culture, status and identity appear to be insufficient without a thorough study of trust. The increasing literature on the study of email communication indicates that trust has not previously been studied in the context of email communication, justification enough for the choice of this element in this research study. As trust can be a significant element affecting communication as a whole, in particular the behaviour and reaction of individuals when they face violations in communications, it is clearly an essential element in the study of email communication. It is possible that if individuals develop a sense of dispositional/ organisational trust, their reactions towards a norm violation in email communication by another member might be less negative.

#### **2.6.5 Relationships between Personality Traits, Culture and Trust**

There have been a number of studies linking personality traits with trust. Brown et al. (2004) examined the link between interpersonal traits and trust in virtual collaboration among distributed teams. They found that interpersonal interaction stemmed from personal dispositions and the user's personality, with the individual's disposition to trust clearly influenced by these interpersonal traits, and perceptions of trustworthiness and communication impacting on the willingness to collaborate. The study concluded that the individual's traits mediate interpersonal trust and the willingness to use new technologies, and hence impact the efficiency of computer-mediated

collaboration. A higher propensity to trust has been linked to extraversion and openness (Sutherland & Tan, 2004), whereas a lower propensity to trust is said to be associated with high conscientiousness. A further study related to the roles of personality traits and trust as predictors of perceptions in virtual reality team candidates, carried out by Jacques et al. (2009), also concluded that personality traits predicted the propensity to trust, discovering positive relationships between extraversion and the propensity to trust, and a connection between propensity to trust and anxiety in technology communication. Matzler, Mooradian and Renzl (2006) also discovered a relationship between agreeableness and propensity to trust.

The impact of culture on trust is another significant factor, and there has been a considerable amount of research examining trust within this area since 1995. Results from a review of this literature by Schoorman, Mayer and Davis (2007) indicate that international and cross-cultural dimensions play a significant role in the issue of trust, and that the concept of propensity to trust can be developed across cultures. In addition, it has also been found that national culture may influence the processes of developing individual and organisational trust (Kim, 2008). Doney, Cannon and Mullen (1998) conclude that trust can be culturally determined, and may depend on social norms or values of shared culture or history, hence differences in trust exist globally between cultures (Kim, 2008; Strong & Weber, 1998), which can result in the willingness to establish trust being formed by an individual's culture (Mockaitis, Rose & Zettinig, 2012). People from collectivistic and individualistic cultures draw from diverse sources in developing interpersonal trust (Branzei, Vertinsky & Camp, 2007); a lack of interdependence and in-group favouritism may decrease the potential for the development of trust between individualists (Jarvenpaa & Leidner, 1999). As Mockaitis et al. (2012, p. 197) state, "The expected lower commitment to groups by individualists should be less conducive to trust", corroborating Kiffin-Petersen and Cordery (2003), who argue that there is a negative relationship between individualism and trust. In contrast, collectivists may form stronger relationships with other collectivists, which may lead to greater trust, since in-group membership is more important for collectivists than for individualists (Hui, Triandis & Yee, 1991). Furthermore, Gomez, Kirkman and Shapiro (2000) found that collectivists evaluated other collectivists as more generous, increasing group identification, harmony and trust.

#### **2.6.6 Questions Not Addressed by Previous Studies**

The following section outlines several gaps the author has identified in the previous literature on email communication, to justify the importance of their inclusion in the present study. Some of

these gaps directly challenge social identity theory and the SIDE model, as well as being an incomplete representation/explanation of how individuals react to email violations in organisational life. These new constructs include global identity, local identity, organisational trust, dispositional trust, personality extraversion, and personality emotional stability traits. Each gap is reviewed and justified below.

#### *2.6.6.1 Global and local identities*

Global identity and local identity are proposed to have the greatest potential impact on reactions to email violations in an international business context. Global identity demands thinking beyond the local (e.g. beyond local culture/services/norms etc.); it is a more international way of thinking, denoted by higher openness to other cultures, ways of life and working. By contrast, people with local identity have a much narrower view of society, and their group identity is also very strongly 'local'. People with global identity are much more comfortable and effective in their online communications, resulting in greater global reach as a result.

Previous studies indicate the crucial effects of global identity and local identity (Erez & Gati, 2004; Erez et al., 2013; Fitzsimmons, 2013; Glikson & Erez, 2013; Hatipoglu, 2007; Shokef & Erez, 2006) on emotional and behavioural reactions. However, no previous research has examined the moderating effect of global identity and local identity factors on the emotional and behavioural reactions to email norm violations.

#### *2.6.6.2 Dispositional and organisational trust*

Trust is an essential component for building safe inter-relationships even on a biological level; humans have an instinctual need to establish trust, to feel safe in their face-to-face interactions, and trust is equally if not more important in online communication due to the availability of less social signals to determine in-group (safe/trustworthy) or out-group status (safe?/trustworthy?). Studies suggest there are individual differences in the levels of interpersonal trust (i.e. dispositional trust), and in the extent to which employees trust the organisation they work for (e.g. their employer, their managers, and anyone internal who has a position of power over them). The author hypothesises that the more an individual trusts their organisation, the more likely they will be to acquiesce and comply with email violations. The additional stress of working with low organisational trust (not trusting managers) creates reactions to email violations that are more negative, even from senders outside the organisation (based on author's experience, not on published research, thereby highlighting a gap). Prior literature indicates the critical effects of



dispositional trust (propensity to trust) and trust (Ashleigh et al., 2012; Brown et al., 2004; Colquitt et al., 2007; Dirks & Ferrin, 2001; Jarvenpaa et al., 2004; Paul & McDaniel, 2004; Sarker et al., 2011; Sutherland & Tan, 2004; Zeffane et al., 2011) on reactions. However, previous research has not inspected the moderating effect of dispositional and organisational trust on the emotional and behavioural reactions to email norm violations.

#### *2.6.6.3 Personality traits - extraversion and emotional stability*

Studies suggest that extraverts tend to be more group-oriented, as they enjoy a more active social life, and typically belong to more groups, implying quantity over quality in interpersonal relationships. This links extraversion to social identity theory. By contrast, introverts tend to be more independent, less influenced by cultural social norms, and less social/belong to fewer groups. This justifies inclusion of this personality trait in this study.

Studies suggest that low emotional stability can have a negative effect on communication, as such individuals tend to have cognitive schemas and emotional reactions to others that are more negative, whereas people with high emotional stability tend to react calmly, under stressful/challenging situations. No previous study has examined the link between emotional stability and online communication. However, both high extraversion and high emotional stability are constructs frequently screened for by human resources personnel when selecting the best candidates. It appears to be a major omission that researchers have not considered the effect of emotional stability on online communication in organisational life, as this mode now dominates the interactions of international employees. Former research indicates the vital impacts of extraversion and emotional stability on emotional and behavioural reactions (Barlett & Anderson, 2012; Hammick & Lee, 2014; Hertel et al., 2008; Jacques et al., 2009; Jadin et al., 2013; Tidwell & Sias, 2005; Zhou & Lu, 2011). However, no previous studies have examined the moderating effect of extraversion and emotional stability factors on the emotional and behavioural reactions to email norm violations.

## **2.7 Development of Study 2 Conceptual Model**

From the gaps identified above, the author has revised the Study 1 model to test for the additional effects of global identity, local identity etc., as shown in Figure 2.4.

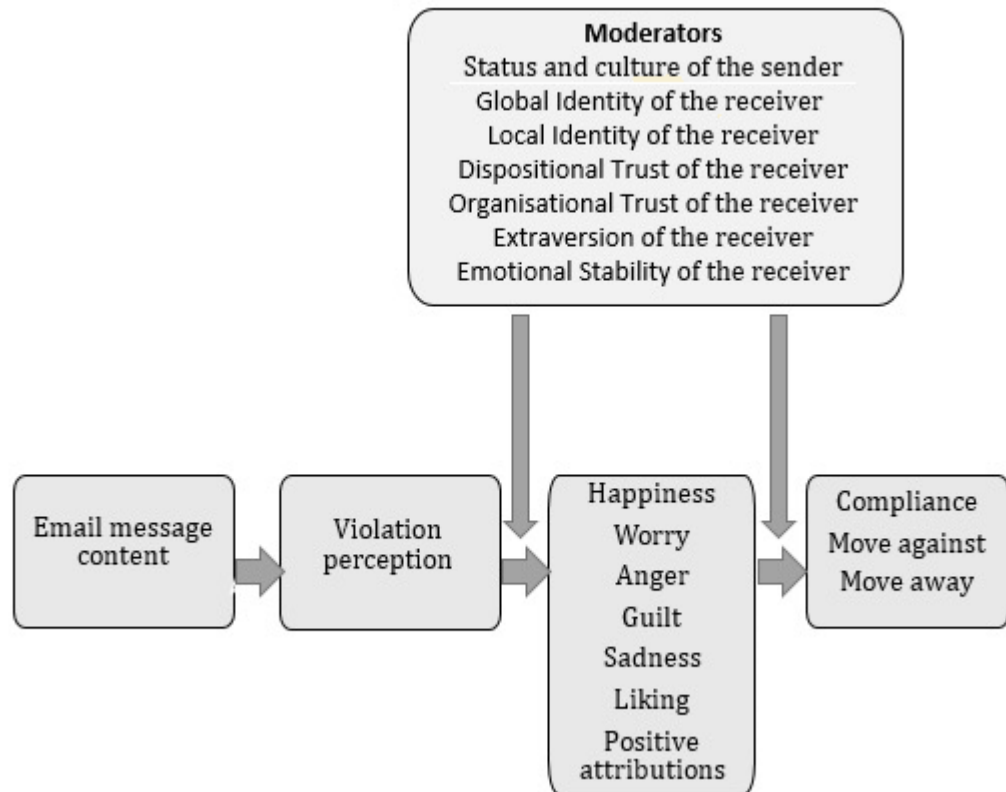


Figure 2.4: Conceptual model of hypothesised relationships tested in Study 2

## 2.8 Study 2 – Hypotheses

Based the above described model and empirical research, the personality traits of the email receiver (i.e. extraversion and emotional stability of the receiver), the email receiver's trust (i.e. dispositional and organisational trust of the receiver) and the receiver's identity (global and local) are proposed to be determinants of the email recipient's emotional and behavioural reactions to perceived norm violation in email communication, aside from the email sender's status and cultural background. Hence, the following hypotheses (whose moderating variables are shown in Table 2.2) were formulated to extend the findings of Study 1.

Table 2.2: Main topics of Study 2 hypotheses

	Moderating variables	Direct effect of the variables	Interaction with sender's culture	Interaction with sender's status
1	Global identity	Hypothesis 5	Hypothesis 11	Hypothesis 17
2	Local identity	Hypothesis 6	Hypothesis 12	Hypothesis 18
3	Dispositional trust	Hypothesis 7	Hypothesis 13	Hypothesis 19
4	Organisational trust	Hypothesis 8	Hypothesis 14	Hypothesis 20
5	Extraversion	Hypothesis 9	Hypothesis 15	Hypothesis 21
6	Emotional stability	Hypothesis 10	Hypothesis 16	Hypothesis 22
	Total	6 Hypotheses	6 Hypotheses	6 Hypotheses

Direct effect (H5- H10)

### **2.8.1 Global/ local identity**

It is essential to understand that individuals today may exhibit negative behaviour towards a norm violation in email communications because they have embraced a certain level of global identity or local identity. This advances previous studies and presents a new stance from which to better understand the topic. Therefore, a direct effect from global and local identities is hypothesised below.

H5: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response toward the email sender when the email recipient has a higher global identity, when compared to an email recipient who has a lower global identity.

H6: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has a lower local identity compared to an email recipient who has a higher local identity.

### **2.8.2 Organisational trust/ dispositional trust**

There may be a moderating effect from organisational trust on the affective and behavioural reactions to email norm violations and a moderating effect from dispositional trust on affective and behavioural reactions to email norm violations also. Thus, the following hypotheses are proposed.

H7: Participants would make more positive attributions, show less negative affective response, and less negative behavioural response when the email recipient has higher dispositional trust (DT).

H8: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has higher organisational trust (OT) than when the email recipient has lower OT.

### **2.8.3 Extraversion/ emotional stability**

There may be a possible moderating effect resulting from the extraversion and emotional stability of the email receiver on the affective and behavioural reactions to email norm violations. Thus, the following hypotheses are anticipated.

H9: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has higher scores in extraversion than when the email recipient who has lower scores in extraversion.

H10: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has higher scores in emotional stability than when the email recipient has lower scores in emotional stability.

## **2.9 Interaction with Sender's Culture (H11- H16)**

### **2.9.1 Global/local identity**

There may be interactions between the email receiver's global identity and the email sender's culture and an interaction between the email receiver's global identity and the email sender's status that influences reactions to email violations. Thus, the following interaction hypotheses are anticipated.

H11: Participants would make more positive attributions (H11a), show a less negative affective response (H11b), and show a less negative behavioural response (H11c) when the email recipient has a higher global identity and the email sender is from a different culture, than when the email recipient has a lower global identity and the sender is from the same culture.

H12: Participants would make more positive attributions (H12a), show a less negative affective response (H12b), and show a less negative behavioural response (H12c) when the email recipient has a lower local identity and the email sender is from a different culture, than when the email recipient has a higher local identity and the sender is from the same culture.

### **2.9.2 Dispositional trust/ organisational trust**

According to previous findings concerning the effect of the sender's culture and status, there might be a possible interaction between the dispositional and organisational trust of participants and the email sender's culture. Moreover, there could be a possible interaction between the dispositional and organisational trust of participants and the email sender's status. Thus, the following interaction hypotheses are anticipated.

H13: Participants would make more positive attributions (H13a), show a less negative affective response (H13b), and show a less negative behavioural response (H13c) when the email recipient has higher dispositional trust and the sender is from a different culture than when the email recipient has lower dispositional trust and the sender is from the same culture.

H14: Participants would make more positive attributions (H14a), show a less negative affective response (H14b), and show a less negative behavioural response (H14c) when the email recipient

has higher organisational trust and the sender is from a different culture than when the email recipient has lower organisational trust and the sender is from the same culture.

### **2.9.3 Extraversion/ emotional stability**

With reference to the moderation effect found in the first series of studies, it is supposed that the extraversion and emotional stability of the email recipient may interact with the cultural background of the email sender, affecting the Study 2 outcomes. Extraversion and the emotional stability of the email receiver may also interact with the sender's status, influencing affective and behavioural reactions to email norm violations. Thus, the following interaction hypotheses are proposed.

H15: Participants would make more positive attributions (H15a), show a less negative affective response (H15b), and show a less negative behavioural response (H15c) when the email recipient has higher extraversion and the sender is from a different culture than when the email recipient who has lower extraversion and the sender is from a different culture.

H16: Participants would make more positive attributions (H16a), show a less negative affective response (H16b), and show a less negative behavioural response (H16c) when the email recipient has higher emotional stability and the sender is from a different culture than when the email recipient has lower emotional stability and the sender is from a different culture.

## **2.10 Interaction with the Sender's Status (H17- H22)**

### **2.10.1 Global/ local identity**

H17: Participants would make more positive attributions (H17a), show a less negative affective response (H17b), and show a less negative behavioural response (H17c) when the email recipient has a higher global identity and the email sender has the same status than when the email recipient has a lower global identity and the sender has a different status.

H18: Participants would make more positive attributions (H18a), show less negative affective response (H18b), and show less negative behavioural response (H18c) when the email recipient has a lower local identity and the email sender has the same status than when the email recipient has a higher local identity and the sender has a different status.

### **2.10.2 Dispositional trust/ organisational trust**

H19: Participants would make more positive attributions (H19a), show a less negative affective response (H19b), and show a less negative behavioural response (H19c) when the email recipient

has higher dispositional trust and the sender is of the same status than when the email recipient has lower dispositional trust and the sender is of a different status.

H20: Participants would make more positive attributions (H20a), show a less negative affective response (H20b), and show less negative behavioural response (H20c) when the email recipient has higher organisational trust and the sender is of the same status than when the email recipient has a lower organisational trust and the sender is of a different status.

### **2.10.3 Extraversion/ emotional stability**

H21: Participants would make more positive attributions (H21a), show a less negative affective response (H21b), and show a less negative behavioural response (H21c) when the email recipient has higher scores in extraversion and the sender is of the same status as compared to when the email recipient has lower scores in extraversion and the sender is of different status.

H22: Participants would make more positive attributions (H22a), show a less negative affective response (H22b), and show a less negative behavioural response (H22c) when the email recipient has higher scores in emotional stability and the sender is of the same status than when the email recipient has lower scores in emotional stability and the sender is of different status.

## **2.11 Chapter Summary**

This chapter has reviewed relevant theory and extant empirical research on the constructs that influence people's reactions to email violations, including the major social identity constructs of work status and culture, as well as the mediating effects of emotional reactions, liking and attributions, and the additional moderating effects of global identity, local identity, trust and personality. The review has also highlighted that email violation forms a negative impression of the sender (e.g. that they are less competent, less trustworthy or less likeable), which can damage professional relationships. Furthermore, these negative perceptions vary depending on the known/unknown culture of the email sender (Vignovic & Thompson, 2010). Mackie et al. (2000) and McGoldrick (2011) identified a general negative out-group bias in reaction to violation of email norms, but previous studies did not consider both the culture and status of sender and receiver, which this study addresses.

Moreover, the review also highlighted the extremely limited previous research on email communication violations, which has largely been confined to two studies, both of which were

Master's degree dissertations; it would seem that academic/professional researchers are largely unaware of or uninterested in this important issue. In addition, the author found no previous studies exploring the links between global/local identity, trust and personality traits with either social identity theory, appraisal theory or online communication reactions.

The 1990s introduced widespread email communication within the workplace, and the 2000s introduced worldwide mobile communications, including mobile email communications via smartphones and tablets. Thus, email communication is now a global, widely accessible tool, used daily across all cultures and organisations, and it is prone to involve innumerable email violations, which we are only starting to understand, conceptualise and test recipients' reactions towards.

The review clearly justifies the need for the present study testing the constructs, relationships, sectors and countries tested in Study 1 and Study 2, including important effects proceeding from interaction, moderation and mediation. It also justifies the need to revisit social identity theory to determine if this still provides the best explanatory framework for reactions to email communication violations, based on the idea of in-group and out-group processes, intergroup emotions theory, categorisation and reactions.

### **3 Study 1 Methods**

Previous studies suggest that mistakes or violation of etiquette norms in email communication may affect recipients' emotional and behavioural reactions towards the email sender. However, providing social information about the email sender, such as culture and work status, may moderate (strengthen or weaken) these reactions. Therefore, the email recipient's emotional and behavioural reactions to norm violation perception are expected to vary depending on the culture and status information provided on the sender. The email recipient's behavioural reactions may also be mediated by his/her emotions, attributions and liking towards the email sender.

Study 1 aimed to assess the impact of six experimental variations of the same email communication vignette, all of which included the same deliberate mistake in the text, but provided different social information about the email sender's cultural background (same/different from recipient) and work status (higher/lower/same as recipient) (see Tables 3.1, 3.3 and 3.4), on the relationship between email norms violation and behavioural reactions outcomes, as moderated by the culture and status of the sender, and mediated by the recipients emotional reactions and attributions towards the email sender, in healthcare and higher education sectors in UK and Saudi Arabia.

#### **3.1 Study 1 – Design**

Study 1 employed an experimental cross-cultural study to investigate the impact of status and culture on reactions to email violation using a questionnaire survey methodology. The independent variable was the email vignette, which included a request including a deliberate email violation of content and etiquette, designed to provoke an email violation reaction in the participants (email recipients). The moderator variable involved six experimental variations of social information provided about the email sender's work status and cultural background. Table 3.1 below shows the six experimental conditions, created based on varying social information about the email sender. Table 3.2 shows an overview of Study 1 research designs (samples and variables).



Table 3.1: Six experimental conditions varying email sender's work status and culture

Email Sender's Culture	Email Sender's Status		
	Same	Lower	Higher
Same	(1) Same culture, same status	(2) Same culture, lower status	(3) Same culture, higher status
Different	(4) Different culture, same status	(5) Different culture, lower status	(6) Different culture, higher status

The first mediator variable was affective response to the email violation. Respondents could choose from one of five emotional reactions to the email violation including happiness, sadness, worry, anger, or guilt, as well as indicate their liking for email sender. The second mediator was recipients' attributions to the email violation.

More detailed description of the variables tested the research model in Study 1 are presented below.

### 3.1.1 Independent variable: email Vignette

The independent variable in Study 1 was the presentation of the email vignette, which included identical message content and violations of email communication norms (Figures 3.1-3.2). Previous studies suggest that when participants are exposed to these types of email violations, their perception, and emotional and behavioural reactions may be affected. Lea and Spears (1992) indicated that different forms of language cause different reactions.

Table 3.2: Overview of Study 1a and Study 1b samples (professional groups, IV, DVs, mediators and moderators)

Study	Study 1(a)	Study 1(b)
Sample	Higher Education	Healthcare
Groups	Lecturers and Students	Doctors and Nurses
IV	Email message content	Email message content
DV	Behavioural Reactions	Behavioural Reactions
Mediators	Emotional Reactions	Emotional Reactions
	Attributions	Attributions
	Liking	Liking
Moderators	1) Sender National Culture	1) Sender National Culture
	2) Sender Work Status	2) Sender Work Status
	3) Recipient Culture a) Recipient Collectivism b) Recipient Power Distance	3) Recipient Culture a) Recipient Collectivism b) Recipient Power Distance
	4) Recipient Work Status	4) Recipient Work Status

### 3.1.2 Dependent variables: behavioural reactions (outcome variables)

The dependent variables were also recipient's behavioural reactions towards the norm violation perception, which had three reactions (compliance, moving away, or moving against the email sender). These variables were scored as continuous variables.

### **3.1.3 Mediating variables: emotional reactions, attributions, liking**

The mediating variables were the recipient's emotional reactions (i.e. happiness, worry, anger, guilt and sadness), attributions (positive/internal and external attributions) and liking towards the email sender. These variables were scored as continuous variables.

### **3.1.4 Moderating variables: culture and status of sender and recipient**

The two moderating variables which were manipulated in the email vignette were cultural background and work status of the email sender. The experimental manipulation was achieved by administering 16 different variations of the questionnaire (each containing the same deliberate mistakes), but with varying social information about the email sender's cultural background and work status (Tables 3.3-3.4). The first moderator variable was a cultural cue, with two categories (i.e. email sender is from same culture/email sender is from different culture). Culture was operationalised as the sender's reported culture (information provided with the email Tables 3.3-3.4), and participant's self-reported identified culture (e.g. Saudi versus other culture).

The second moderator variable was work status, which had three levels (i.e. email sender is from the same status, lower status, or higher status, as compared with the email recipient). The extent of difference in work status is important; as we would expect effects to be greater when the sender/recipient had same status, as compared with different (higher/lower) status. Status was operationalised as the sender's reported status (information provided with the email Tables 3.3-3.4), and participant's self-reported identified status (e.g. lecturers versus students, doctors versus nurses). Work status of the recipient (participant) was manipulated by distributing different questionnaires for each professional group status (i.e. students, lecturers, nurses and doctors).

## **3.2 Study 1 - Participants**

Table 3.5 shows a breakdown of the Study 1 sample, which included 857 participants (32% men, 67% women, average age 36 years,  $SD=12.62$ ) from the UK ( $N=420$ , 49%) and KSA ( $N=437$ , 51%). The participants were recruited from two professional sectors, including higher education (HE,  $N=445$ , 52%) and healthcare (HC,  $N=412$ , 48%) using non-probability purposive sampling, which created four professional dyads: UK Lecturer/UK Student, KSA Lecturer/KSA Student, UK Doctor/UK Nurse, and KSA Doctor/KSA Nurse; and eight study groups, as shown in Table 3.5. Tables 3.6-3.7 summarise the sample characteristics for Study 1a (higher education study) and 1b (healthcare study).

Table 3.3: Study 1a – 6 email vignette conditions received by lecturers and students in HE sample

LECTURER GROUPS RECEIVED FOUR EMAIL VIGNETTE CONDITIONS		
Email sender's culture	Email Sender's Status	
	Same status	Lower status
Same	<b>Condition 1 (Same Status/Same Culture):</b> You have received the following email from a LECTURER who has the SAME CULTURAL BACKGROUND as you.	<b>Condition 3 (Lower Status/Same Culture):</b> You have received the following email from a STUDENT who has the SAME CULTURAL BACKGROUND as you.
Different	<b>Condition 2 (Same Status/Different Culture):</b> You have received the following email from a LECTURER and has a DIFFERENT CULTURAL BACKGROUND from you.	<b>Condition 4 (Lower Status/Different Culture):</b> You have received the following email from a STUDENT and who has a DIFFERENT CULTURAL BACKGROUND from you.
STUDENT GROUPS RECEIVED FOUR EMAIL VIGNETTE CONDITIONS		
Same	<b>Condition 1 (Same Status/Same Culture):</b> You have received the following email from a STUDENT who has the SAME CULTURAL BACKGROUND as you.	<b>Condition 3 (Higher Status/Same Culture):</b> You have received the following email from a LECTURER who has the SAME CULTURAL BACKGROUND as you.
Different	<b>Condition 2 (Same Status/Different Culture):</b> You have received the following email from a STUDENT and who has a DIFFERENT CULTURAL BACKGROUND from you.	<b>Condition 4 (Higher Status/Different Culture):</b> You have received the following email from a LECTURER and has a DIFFERENT CULTURAL BACKGROUND from you.

Table 3.4: Study 1b – 6 different email vignette conditions received by doctors and nurses in HC sample

DOCTOR GROUPS RECEIVED FOUR EMAIL VIGNETTE CONDITIONS		
Email sender's culture	Email Sender's Status	
	Same status	Lower status
Same	<b>Condition 1(Same Status/Same Culture):</b> You have received the following email from a DOCTOR who has the SAME CULTURAL BACKGROUND as you.	<b>Condition 3(Lower Status/Same Culture):</b> You have received the following email from a NURSE who has the SAME CULTURAL BACKGROUND as you.
Different	<b>Condition 2(Same Status/Different Culture):</b> You have received the following email from a DOCTOR and has a DIFFERENT CULTURAL BACKGROUND from you.	<b>Condition 4(Lower Status/Different Culture):</b> You have received the following email from a NURSE and who has a DIFFERENT CULTURAL BACKGROUND from you.
NURSE GROUPS RECEIVED FOUR EMAIL VIGNETTE CONDITIONS		
Same	<b>Condition 1 (Same Status/Same Culture):</b> You have received the following email from a NURSE who has the SAME CULTURAL BACKGROUND as you.	<b>Condition 3 (Higher Status/Same Culture):</b> You have received the following email from a DOCTOR who has the SAME CULTURAL BACKGROUND as you.
Different	<b>Condition 2 (Same Status/Different Culture):</b> You have received the following email from a NURSE and who has a DIFFERENT CULTURAL BACKGROUND from you.	<b>Condition 4 (Higher Status/Different Culture):</b> You have received the following email from a DOCTOR and has a DIFFERENT CULTURAL BACKGROUND from you.

Table 3.5: Breakdown of study sample representativeness in Study 1

Sample	Frequency	Percent
Entire sample	857	100%
Country		
UK	420	49%
KSA	437	51%
Professional Sector		
Higher Education	445	52%
Healthcare	412	48%
Professional Dyad		
KSA lecturer-student	255	30%
UK lecturer-student	190	22%
KSA doctor-nurse	182	21%
UK doctor-nurse	230	27%
Eight Study Groups		
KSA lecturer	110	13%
KSA student	145	17%
UK lecturer	95	11%
UK student	95	11%
KSA doctor	97	11%
KSA nurse	85	10%
UK doctor	146	17%
UK nurse	84	10%

### 3.2.1 Higher education participants (Study 1a)

The first professional sector that was sampled in Study 1 was higher education (N=445), which consisted of 205 lecturers and 240 students from the University of Roehampton, London (UK) and King Abdul Aziz University, Jeddah (KSA). These HE groups were selected to represent higher status (lecturers) and lower status (students) groups within higher education. The lecturer sample age range was from 25 to 71 years, and the student sample age range was from 18 to 52 years (Table 3.6). Participation was entirely voluntary, with no coercion or inducement, and no financial remuneration.

Table 3.6: Characteristics of higher education sample (Study 1a)

Characteristics	Total Higher Education	Lecturers (UK)	Students (UK)	Lecturers (KSA)	Students (KSA)
Total	445	94	95	110	145
Male	142	35	10	32	65
Female	303	60	85	78	80
Age: M(SD)	35.19(12.64)	46.38(10.22)	20.88 (5.07)	43.94 (9.38)	30.66 (6.72)

### 3.2.2 Healthcare participants (Study 1b)

The second professional sector that was sampled in Study 1 was healthcare (N=412), which consisted of 243 doctors and 169 nurses from King Abdul-Aziz University and King Abdul-Aziz University Hospital in KSA, and from the NHS South-Western Trust Service in the UK. These healthcare groups were selected to represent higher status (doctors) and lower status (nurses) groups within healthcare. The doctor sample age range was from 24 to 66 years, and the nurse

sample age range was from 22 to 61 years (Table 3.7). Participation was also fully voluntary, as for the higher education participants.

*Table 3.7: Characteristics of healthcare sample (Study 1b)*

Characteristics	Total Healthcare	Doctors (UK)	Nurses (UK)	Doctors (KSA)	Nurses (KSA)
Total	412	146	84	97	85
Male	137	85	22	19	11
Female	275	61	62	78	74
Age: <i>M(SD)</i>	36.96(12.55)	48.26(7.51)	42.05(11.04)	27.77(3.07)	23.14 (1.68)

### **3.3 Study 1- Measures**

The two professional groups (higher education and healthcare) received identical questionnaires; the only aspect which varied was the email vignette, which was tailored to each professional sector. Overall, the questionnaire included a demographic questionnaire, and 11 standardised and previously validated measurement scales. The validity and reliability of each scale in the present and/or previous studies are also reported below, to ensure the data collected has high internal consistency (i.e. has accurately measured what it is intended to measure, with no inconsistency). Table 3.8 shows the reliabilities of the study measures. A copy of the online and paper-based survey questionnaires is presented in Appendix B1.

#### **3.3.1 Demographic questionnaire**

The investigator-designed demographic questionnaire measured participants' socio-demographic variables including gender, age, nationality, ethnicity and experience, country of birth and living; cultural identity and the language of speech, professional subject area, current position, and duration of occupancy in current role as a lecturer, doctor or nurse.

#### **3.3.2 Use of email and social media**

The email and social media questionnaire developed by MicGoldrick (2011) measured participants' email use (as a screening eligibility question), as familiarity with e-mail was necessary for participation in this study. For participation in these studies, it is important that participants use email frequently (Stephens et al., 2009). Carlson and Zmud (1999) suggest that measuring the use of email can control for the familiarity influence of using email in participants' responses. Participants also answered 'how many emails would you send on a typical day?' and how frequently they use social media systems such as email, mobile phone texting, Facebook, Skype, Twitter, instant messenger and other (please specify), with each social media question rated on a

six-point scale (never, less than once a month, monthly, weekly, daily, very frequently). McGoldrick (2011) found this scale had less than acceptable internal consistency reliability, with Cronbach's  $\alpha = .60$ . In the present study the newer social medium WhatsApp was added to the scale (Cronbach's  $\alpha = .62$ ), to involve five items: Facebook, Skype, Twitter, instant messenger and WhatsApp.

Table 3.8: Study 1a and Study 1b Reliability coefficients

		All sample	UK	KSA	HE	HC	UK (HE)	KSA (HE)	UK (HC)	KSA (HC)
	Items	$\alpha$	$\alpha$	$\alpha$	$\alpha$	$\alpha$	$\alpha$	$\alpha$	$\alpha$	$\alpha$
Group identity	3	.75	.83	.68	.71	.81	.81	.60	.84	.77
Collectivism	6	.80	.76	.76	.82	.77	.74	.77	.76	.75
Power-distance	7	.81	.85	.76	.78	.84	.84	.74	.86	.78
Violation perception	8	.88	.92	.83	.85	.90	.90	.80	.93	.85
Happiness	4	.84	.80	.85	.85	.82	.80	.87	.79	.80
Worry	4	.76	.74	.77	.74	.79	.69	.75	.78	.80
Anger	3	.83	.85	.81	.82	.83	.86	.80	.85	.83
Guilt	4	.84	.79	.84	.83	.85	.81	.82	.78	.87
Sadness	2	.74	.69	.76	.72	.77	.65	.74	.73	.82
Compliance	2	.83	.91	.73	.80	.86	.89	.71	.94	.75
Move against	3	.76	.75	.69	.75	.76	.69	.71	.79	.65
Move away	3	.82	.95	.68	.83	.81	.96	.70	.94	.64
Liking	2	.83	.89	.80	.79	.86	.88	.76	.90	.84
Positive attributions	21	.93	.94	.92	.93	.94	.93	.92	.95	.91
External attributions	4	.86	.88	.62	.58	.88	.61	.55	.63	.68

$\alpha$ = Cronbach's alpha, HE= higher education, HC= healthcare

### 3.3.3 Group identification scale

The group identification scale developed by Gordijn et al. (2006) was used by McGoldrick (2011). Participants' group identity was emphasised in this study's survey by writing the words LECTURER, STUDENT, DOCTOR and NURSE in capital letters. Participants were required to rate three statements based on their group identity such as '*being a LECTURER is a key aspect of who I am*' and '*being a LECTURER means a lot to me*' using a five-point Likert scale (absolutely not, slightly, somewhat, moderately, absolutely). The reliability of the scale was acceptable (Cronbach's  $\alpha = .75$ ).

### 3.3.4 Cultural values

Two dimensions of culture were measured – individualism/collectivism and power distance – as they may affect relationships with others' status and culture. Individualism/collectivism and power distance were measured using the scales administered by Srite and Karahanna (2006), which were derived from Hofstede (1980) and Dorfman and Howell (1988).

#### 3.3.4.1 Individualism/collectivism

Srite and Karahanna's (2006) scale of individualism/collectivism contains six items involving the importance of a group membership, group loyalty, group success and welfare (Lewis & George, 2008). These statements were rated on a five-point Likert scale assessing agreement or disagreement (from 1=strongly disagree to 5=strongly agree). The reliability of the individualism/collectivism scale in this study was good (Cronbach's alpha = .80).

#### 3.3.4.2 Power distance

Srite and Karahanna's (2006) scale to measure power distance contains seven items, such as the extent to which managers should make isolated decisions, request for advice and obtain privileges (Lewis & George, 2008). The statements were rated on a five-point Likert scale assessing agreement or disagreement (1=strongly disagree and 5=strongly agree). The reliability of the power distance scale in this study was good (Cronbach's alpha = .81).

#### 3.3.5 Email vignette

The essence of the study is that participants were asked to read a specifically designed email that contained grammatical errors and an informal writing style such as informal greetings, informal closings, incomplete sentences, spelling mistakes, shortcuts (letters instead of words) and numbers instead of words. In order to control for variables in the two experimental studies, participants were exposed to the same email, containing errors, with different information provided about the sender's culture and status. The email designed by McGoldrick (2011) was used in this study. Figures 3.1-3.2 show the email vignette received by participants in the higher education and healthcare sectors. Participants were informed that they had received the following email from a sender who is of the same/higher/lower status and from the same/different cultural background as them (see Tables 3.3-3.4, above). This email stated *research project* in higher education study, and *patient case study* in healthcare study (see Figures 3.1-3.2).

Hi  
How r u? i'm working on a research project you might be interested in. Free 2 dicsus that together next Monday?  
Cheers!

Figure 3.1: Email vignette received by participants in higher education (Study 1a)

Hi  
How r u? i'm working on a patient case study you might be interested in. Free 2 dicsus that together next Monday ?  
Cheers !

Figure 3.2: Email vignette received by participants in healthcare (Study 1b)

### **3.3.6 Violation perception**

McGoldrick's (2011) violation perception measure was adopted in this study. In the questionnaire, participants were requested to read the email vignette and respond to the email violation in terms of aspects such as: address, shortcuts, message length, language, content, formality, spelling and sign-off. Participants rated their violation perception using a five-point Likert scale, from 5=completely unacceptable to 1=completely acceptable. The reliability (internal consistency) of the violation perception scale was good (Cronbach's alpha = .88).

### **3.3.7 Emotional reactions**

Participant's emotional reactions to violation perception, after reading the email vignette, were measured using the scale developed by Gordjin (2006), previously used in McGoldrick's (2011) study, which measured emotional reactions on a five-point Likert scale (1=absolutely not, 5=absolutely). This scale consists of 17 items measuring 5 emotional factors: happiness (happy, delighted, pleased and amused), sadness (sad and depressed), anger (angry, annoyed and outraged), worry (worried, afraid, distressed and alarmed) and guilt (guilty, ashamed, embarrassed and remorseful). The reliabilities of the subscales ranged from acceptable to good for happiness, worry, anger, guilt and sadness (Cronbach's alpha = .84, .76, .83, .84, .74 respectively).

### **3.3.8 Liking**

The feeling of liking of the email sender was measured by requesting participants to rate their answers to two questions measuring liking used by Lea and Spears (1992) and McGoldrick (2011): *'To what extent would you like the sender?'* and *'To what extent would you enjoy working with the sender?'* A five-point Likert scale was used with 1= never and 5= a great deal (see Appendix B1). The scale reliability was high (Cronbach's alpha = .83).

### **3.3.9 Familiarity perception**

One item was to measure familiarity perception used by McGoldrick (2011), *'How familiar is the sender likely to be to you?'* A five-point Likert scale was used with 1= never and 5= a great deal (see Appendix B1).

### **3.3.10 External attributions**

To determine the causes of the email style from participants' point of view, items from the Revised Causal Dimension Scale (McAuley, Duncan & Russell, 1992) were used, as modified slightly by McGoldrick (2011) referring to the email message and sender. McGoldrick (2011) also added a



question about whether the participant believed the email style to be the result of the sender's ability or situation. Participants were requested to choose one of two answers for each of the five statements: (1) the style of the email was more likely caused by the type of person or the situation; (2) the style of the email was more likely to be manageable or not manageable by the sender; (3) the style of the email was more likely caused by something inside or something outside of the sender; (4) the style of the email was more likely to be something over which the sender had control or something over which the sender had no control; and (5) the style of the email was more likely to be a result of the sender's ability or a result of the sender's situation (see Appendix B1). The second item of the external attribution scale 'the email was manageable or not manageable by the sender' was also removed because it had also poor inter-correlations ( $r=.18$ , within the KSA sample,  $r=.12$  within the KSA higher education sample and  $r=.19$  within the UK healthcare sample). The purpose was to enhance the internal consistency in the scale. The scale of external attribution among the KSA sample still has low reliability ( $\alpha = .62$ ), despite removing the above-mentioned item. The reliability of this scale within the higher education sample is also poor ( $\alpha = .58$ ). Moreover, the reliability of the scale within the UK higher education and KSA higher education is  $\alpha=.61$  and  $\alpha=.55$  respectively. The reliability of the scale cannot be improved by removing the item.

### **3.3.11 Internal (positive) attributions**

Specific internal attributions towards the email sender were measured by asking participants how much they thought the items of an individual-item scale apply to the email sender. McGoldrick (2011) used 25 items. The original scale consisted of 15 items (warmth, intelligence, dominance, flexibility, competence, originality, liveliness, self-confidence, verbal fluency, responsibility, assertiveness, freedom from inhibitions, inner strength, technology awareness and attractiveness), as used by Lea and Spears (1992). McGoldrick included five situational attributes (rushed, work-pressured, relaxed, laziness and stress) from Cramton (2001), and she also involved two items related to the sender's level of training (commercial awareness and training) from Stephens et al. (2009), in addition to three items (trustworthiness, goodwill and empathy) from Vignovic and Thompson (2010). Responses were rated on a five-point Likert scale, from 1= never to 5= a great deal. The scoring of the item 'lazy' was reversed. Four items from the internal attribution scale (i.e. lazy, rushed, stressed and relaxed) were removed because they had poor inter-correlations with other items (for example,  $r= .05, .26, .29, .27$  respectively within UK higher education). The reliability of the internal attribution scale after the removal of these items was high (Cronbach's  $\alpha = .94$ ).

### 3.3.12 Behavioural reactions

The behavioural reactions were measured by three different scales of compliance, move against and move away tendencies. Participants' compliance with the email sender's request was measured by using the scale of 'willingness to comply' derived from the study of Mottet et al. (2004) and modified by Stephens et al. (2009). Responses were rated using a five-point Likert-type scale from 1=very unwilling to 5=very willing. Participants were asked how willing they would be to comply with the email sender's request and similar requests *right now and in future*. In addition, the scale of participants' tendencies towards the email sender, namely; 'move against' consisted of three items: confront them, oppose them, argue with them; and 'move away' also contained three items: avoid them, have nothing to do with them, keep them at a distance. The scale of the tendencies was taken from Mackie et al. (2000). Responses were rated using a five-point Likert scale with 1=not at all and 5=very much. The three behavioural reaction scales were also used by McGoldrick (2011). The reliabilities of behavioural reaction subscales (compliance, move against and move away) were high (Cronbach's alpha = .83, .76, .82 respectively). However, the reliabilities of the 'move against' and 'move away' tendencies scales were lower ( $\alpha = .65$ ,  $\alpha = .64$  respectively) within KSA healthcare than other subsamples.

### 3.4 Measures Translation and Back-Translation and Gender Identification Issues

The original English language measures were translated into Arabic language for the Saudi participants, and were then back-translated into English language, following the recommendations of previous studies (Lewis & George, 2008; Tsui et al., 2007). As it is possible to identify the gender of an email sender from the Arabic language used, due to different indicators for male and female, the Arabic questionnaire was translated separately to be appropriate for males and females separately, so that each gender could not identify the gender of the recipient, males would receive an email from a male sender, and females would receive an email from a female sender. This modification was not required in the UK questionnaires, and the English language used was gender-neutral. Therefore, two versions of the Arabic language questionnaire were produced, one male, one female.

The researcher, with four English language lecturers in KSA who speak Arabic as a first language, completed a back-translation process from Arabic to English, following Matsumoto et al. (2008). The data was collected over a period of seven months. Although very few cross-cultural studies use a back-translation procedure (Tsui et al., 2007), Schaffer and Riordan (2003) recommended

that researchers employ back-translation before administering any measure to respondents who speak a different language than the one in which the measure was originally developed and validated. Tsui et al. (2007) pointed out that most cross-cultural researchers have used measures from one nation (usually the USA) to apply to other nations. The purpose of translating the study's instruments into the respondent's language is not only to be understood, but also so that respondents can more accurately reveal their cultural beliefs and norms when they respond using their first language (Schaffer & Riordan, 2003).

### **3.5 Pilot Study**

Two pilot studies were carried out in preparation for Study 1, as previously conducted by Vignovic and Thompson (2010). Both pilot studies were conducted only in KSA, due to the researcher's concerns about the translation of the questionnaire from English to Arabic (in terms of its content and the clarity of instructions and terminology for Arabic participants). A pilot study is recommended as a quality control measure to ensure that a questionnaire has appropriate face and content validity, length, response format, briefing and data collection procedures (Baker, 1994; Matsumoto et al., 2008; Schaffer & Riordan, 2003; Teijlingen & Hundley, 2001).

#### **3.5.1 Pilot Study 1**

The purpose of the first pilot study was to determine the appropriateness of the Arabic language, the survey instructions, questionnaire items and format of the questionnaire (Lewis & George, 2008). A letter written in Arabic with pilot study instructions, and Arabic and English versions of the questionnaire were distributed by hand to three different groups:

1. Four bilingual English-Arabic language teachers (native Arabic speakers) cross-checked the translation from English to Arabic language to ensure it was correct;
2. Six Arabic language teachers (Saudis nationals) to ensure the quality of the meaning and in the Arabic context;
3. 11 psychology lecturers (100% Arabic) checked to ensure the similarity between the English and Arabic versions regarding the psychological measures and survey instructions.

This pilot study was conducted during April 2012, and each pilot participant was given two weeks to review the questionnaire and provide valuable feedback to improve it by writing comments in the questionnaire by hand, which the researcher personally collected from each participant. The pilot

feedback suggested making specific modifications to the Arabic language version to improve clarity for the reader, however no changes to the content were suggested.

### **3.5.2 Pilot Study 2**

After the above modifications had been implemented, a second pilot study of the revised questionnaire in Arabic language was administered to a sample of approximately 32 university students registered at Umm Al-Qura University, Makkah, KSA. The students were recruited voluntarily using opportunity sampling in April 2012. The aims of this pilot study were to determine the appropriateness of the questionnaire items for testing the study hypotheses; to ensure that the survey measures and procedures were understood by potential participants; and to estimate the duration required for response (Breakwell et al., 2006). It also assisted in determining the external validity of the study design and instruments. The survey was administered to students by the researcher in person, and were collected by the researcher from the class the next day. The pilot students were recruited from several classes, in order to reduce any risk of bias from sampling students in one classroom. The pilot participants provided feedback by writing on the questionnaire. The estimated time for pilot participants to complete the survey was 15-20 minutes. The data collected were manually entered into SPSS, where a number of statistical analyses were performed to assess the validity and reliability of questionnaire measures. To ensure content validity, correlations were performed between each item's score and the total score of the measure, which demonstrated good content validity. Pilot participants reported no problems with ambiguity or difficulty completing the questionnaire.

## **3.6 Reliability and Validity**

### **3.6.1 Reliability (internal consistency)**

Reliability was assessed for each measure in Study 1, using Cronbach's alpha. Table 3.8 presents the reliabilities (alphas) of the composite scales and subscales for the entire sample, the UK sample, the KSA sample, the HE sample, the healthcare sample, the UK higher education sample, the KSA higher education sample, the UK healthcare sample and the KSA healthcare sample.

### **3.6.2 Internal validity**

All psychometric measures used in this study were validated to ensure that they are accurately measuring their intended construct. Validity was assessed using face and content validity. Face (expert) validity was assessed in the first pilot study by 11 psychology lecturers who deemed that

the Study 1 questionnaire has good face validity (i.e. it was clear from the questionnaire content and instructions what constructs the questionnaire was intended to measure). To ensure internal validity, the participants in KSA and UK were both randomly assigned to the six experimental conditions, so that any difference between the experimental groups was due to chance alone, and not due to selection bias. Content validity was confirmed for all nine samples (i.e. entire sample, and sub-samples), as there were highly significant correlations between every single item and its respective composite scale. Good internal validity indicates that each measure is accurately measuring its intended construct.

### **3.6.3 External validity**

External validity is the degree to which the outcomes can be generalized to the target population of the study, and is based on the sample size being large and representative of the wider study population. Random sampling is required to ensure external validity, where every member of the target population has an equal chance of being selected. In Study 1, random sampling was not possible, as participants could not be selected randomly from a database, in KSA or UK (non-random purposive sampling was used to identify eligible participants).

The study recruited a sufficient quasi-random sample of groups through assessing individuals of different status, and from two different cultural backgrounds and two professional fields.

## **3.7 Study 1- Procedure**

### **3.7.1 Authorisation procedures in KSA and UK**

*KSA:* A permission letter was obtained from King Abdul Aziz University, Vice Presidency for Graduate Studies and Research in 2012, granting the researcher permission to collect data for his study and confirming that the university would provide all facilities required to administer the survey questionnaires. King Abdul Aziz University Hospital was included in the permission because it belongs to the Deanery of Medicine in King Abdul Aziz University.

*UK:* In the UK, permissions were gained from the University of Roehampton for the Higher Education sample, and from the NHS South-Western Trust Service for the healthcare professional sample. Moreover, informed consent was obtained from all participants.

### 3.7.2 Recruitment

*KSA:* Participants in both HE and healthcare sectors were randomly assigned to the six conditions by distributing six different versions of the paper questionnaire, modified for each sector. The six questionnaire versions were randomised by the researcher, before distribution by hand across both King Abdul-Aziz University and King Abdul-Aziz University Hospital in Jeddah, KSA. These two settings were selected by the researcher for their ease and accessibility (as the researcher has contacts there who acted as gatekeepers to facilitate data collection) and logistically proximity during fieldwork.

*UK:* Online questionnaires were used to collect data. Lecturers and students from various faculties of the University of Roehampton were invited through the staff email system by the supervisor (for lecturers), and through the SONA systems at the department of psychology (for students) to invite participants to complete the online survey in exchange for course credits. In the healthcare sector, the Head of Research in the NHS South-Western Trust emailed the survey invitation email to all doctors and nurses working in the Trust. The University of Roehampton was selected by the researcher for ease and accessibility as he is a registered student here. The NHS South-Western Trust was chosen as it collaborates with the University of Roehampton. The UK was the country selected, as the researcher had a visa to study in UK only.

*UK Online Survey:* The researcher built the online survey for the UK sample using Lime Survey set-up on the webstudies.net site. The UK participants received an email message containing information about the study and a link to complete the questionnaire. The survey links were sent to higher status groups (lecturers and doctors) randomly embodied one of four conditions (see Tables 3.3-3.4): (1) the sender is of the same culture and same status; (2) the sender is of the same culture and lower status; (3) the sender is of a different culture and same status; or (4) the sender is of a different culture and lower status. Similarly, the links emailed to the lower status groups (students and nurses) randomly embodied one of four conditions (see Tables 3.3-3.4): (1) the sender is of the same culture and same status; (2) the sender is of the same culture and higher status; (3) the sender is of a different culture and same status; or (4) the sender is of a different culture and higher status.

*KSA paper-based survey:* In the KSA, all participants from higher education (i.e. lecturers and students) and healthcare (i.e. doctors and nurses) received pen-and-paper questionnaires. Questionnaire packs were distributed to willing participants, and then collected by the Department

of Development and Research in King Abdul-Aziz University. The procedure for allocating conditions was the same in both UK and KSA except that different procedures in KSA were required to accommodate the gender segregation policies. In the KSA sample, gender was kept representative by assigning female senders to recruit female participants from the female-only colleges, and assigning male senders to recruit male participants. Therefore, two different versions of each questionnaire were used in KSA: one for males and the other one for females. The lecturer, student, doctor and nurse groups each received eight Arabic versions of the survey (four for males and four for females).

### **3.7.3 Data collection phases in UK and KSA**

The data collection in the UK and KSA was conducted consecutively, starting in October 2012 in KSA and then one month later in the UK.

In KSA, data collection took place in person over a period of 3-4 months, commencing in October 2012 and ending in January 2013. A paper-and pen survey was preferable over an online survey for the Saudi population, as internet is not yet widely available or used for survey purposes. The researcher first collected data from the HE sample at King Abdul-Aziz University in Jeddah, followed by the healthcare sample at King Abdul-Aziz University Hospital. The data collection period across HE and healthcare sectors overlapped.

The researcher was able to collect the UK data online while still in KSA from both the higher education and healthcare sectors simultaneously. An online survey was appropriate for the UK sample, as both UK higher education and healthcare have excellent internet connectivity; the research was able to collect data in KSA simultaneously, which saved time and expenses, and the UK population are more familiar with online questionnaires. The UK data collection commenced in November 2012 and continued for 7 months up to May 2013, as the response to online surveys is typically slower, therefore requiring more time.

### **3.7.4 Data collection procedures**

Participants in each country were informed by email (UK) and questionnaire form (KSA) about the voluntary nature of participation and their right to withdraw from the study at any time, without penalty, and to have their data destroyed. All participants were guaranteed anonymity, and no names were collected. With the pen-and-paper survey (KSA), informed consent was obtained before completing the survey. With the online survey, participants gave consent by ticking a radio

button before proceeding, as is standard procedure when using online surveys. By indicating consent, online participants were able to complete the survey. The standard debriefing page appeared at the end of both the pen-and-paper and the online survey questionnaire (see *consent and debriefing pages in Appendix B3*). Confidentiality and anonymity were upheld and all data transmitted was encrypted. Participants were required to provide an anonymous participant code at the beginning of the survey. They were informed that they could abstain from answering any part(s) of the questionnaire and at any point without needing to justify their decision. They were also informed that they could request for their data to be withdrawn at any time after participation in the study by contacting the investigator or the director of the study using the anonymous participant code. No participant asked to withdraw from the study.

Firstly, participants were asked to complete a section on demographic and personal information about email use and cultural values. Secondly, participants were required to read a short email (Axtell, Moser & McGoldrick, 2012), and respond to questionnaire items according to their emotional and behavioural reactions. The procedure was specified in advance for the data collection and did not change after the study began.

### **3.8 Study 1- Ethical Considerations**

The British Psychological Society (2000) ethical considerations for conducting research with human subjects were followed for both the KSA and UK samples. An ethical approval was obtained from the Ethics Committee at the University of Roehampton (Appendix B4). All data collected from participants were stored securely in accordance with the UK Data Protection Act (National Archives, 1998). Conducting research requires competence, honesty and integrity, and assurances of safety for both the researcher and the participants, to ensure no risk of harm, as well as participant anonymity, confidentiality, briefing, debriefing, and informed consent. It is important that informed consent must be given by each participant individually (Breakwell et al., 2006).

Participants' consent is participant's agreement to participate voluntarily in the study. It was obtained before administering the questionnaires for the participants to complete. The participants were informed of their rights to voluntarily consent or decline to participate, and to withdraw participation at any time without penalty (Breakwell et al., 2006). Participants were informed about the purpose of the study and the procedures that would be used to collect the data, and were assured that there were no potential risks involved. Participants were told that these studies would



investigate their reactions to email. Their reactions can be demonstrated by requesting participants to rate their responses on emotional and behavioural scale items.

Anonymity and confidentiality were maintained throughout the study (Breakwell et al., 2006). Participants were assured that their responses and the results of the study would be anonymous. When participants are promised confidentiality it means that the information they provide will not be publicly reported in a way which identifies them. Confidentiality was maintained by keeping the collected data confidential and not revealing the participants' identities when reporting. No identifying information was entered onto the questionnaires, and questionnaires were only numbered after the data was collected. Lastly, the contact information of the researcher and supervisor was provided in case of any further questions or complaints. After the data was collected, the participants were given information which they might need or request concerning the nature of the study (debriefing of participants) (Breakwell et al., 2006). The following chapter presents the results of Study 1.

## 4 Results of Study 1 (Higher Education & Healthcare)

### 4.1 Overview

This chapter reports the quantitative hypothesis test results for the survey sample from the UK and KSA in two professional sectors, namely higher education (UK HE, N=195; KSA HE, N=248) and healthcare (UK HC, N=230; KSA HC, N=181), which includes a higher status group (i.e. lecturers and doctors) a lower status group (i.e. students and nurses), who were surveyed separately in the each country to test the conceptual model (Figure 2.3). This chapter compares the results between the two countries. The nature of the study participants and materials were previously described in the method chapter (chapter 3). Appendix C shows the descriptive statistics (mean, standard deviation, range) for the psychometric scale measures used in the study. Table 4.1 summarises the participants randomised to each condition, by country and sector. Appendix D1 presents data analysis procedures.

*Table 4.1: Breakdown of the study samples across six experimental conditions*

Sender's status	Sender's culture	KSA HE sample	UK HE sample	KSA HC sample	UK HC sample
Lower	Same	27	21	23	46
	Different	28	21	24	35
Same	Same	58	47	47	51
	Different	68	57	41	54
Higher	Same	39	21	22	18
	Different	34	23	20	19

HE= Higher Education, HC= Healthcare

### 4.2 Response Rate

For the online questionnaire in the UK, 1553 invitations were sent, receiving 496 responses, 176 of which were discarded due to incomplete responses, representing a final response rate of 37%. For the paper-based questionnaire in Saudi Arabia, 900 questionnaires were distributed of which 555 were returned. Of these, 118 were incomplete and discarded, leaving 437 questionnaires for the analysis (49% response rate). Table 4.2 shows the detailed response rates.

Table 4.2: Response rate for each group in the higher education and healthcare study

Country	Groups	Distributed	Returned	Incomplete	complete	Response rate %
KSA Samples	Lecturer	250	135	25	110	44%
	Student	250	179	34	145	58%
	Doctor	200	123	26	97	49%
	Nurse	200	118	33	85	43%
	Total/average	900	555	118	437	49%
UK Samples	Lecturer	406	137	42	95	23%
	Student	122 recruited	122	27	95	78%
	Doctor	620	208	62	146	24%
	Nurse	405	129	45	84	21%
	Total/average	1553	496	176	420	37%

### 4.3 Data Screening and Checking of Assumptions

Initial data screening was performed to check for statistical assumptions for all 17 independent, moderator, mediator and dependent continuous variables in Study 1. The descriptive statistics are shown in Table 4.3 for the entire sample. The data were initially screened for missing values, univariate and multivariate outliers, normality, linearity and homogeneity of variances. Missing values were examined using the SPSS Missing Values Analysis procedure, which found that missing values were completely at random (MCAR), indicating no problem with missing values for three of the professional dyads, including KSA Lecturer/KSA Student (Little's MCAR test: Chi-Square = 555.002, DF = 532, Sig. = .237), KSA Doctor/KSA Nurse (Little's MCAR test: Chi-Square = 487.452, DF = 496, Sig. = .599), and UK Doctor/UK Nurse (Little's MCAR test: Chi-Square = 30.307, DF = 30, Sig. = .450). However, the UK Lecturer/Student dyad had missing values not at random, as Little's MCAR test was significant (Chi-Square = 248.860, DF = 173, Sig. = .001). This suggests a risk of non-response bias, however the percentage of missing data did not exceed 20% missing for any case in the UK higher education sample, so it is conservative, meaning it should not affect the results or representativeness of this sample (Tabachnick & Fidell, 2007).

Next, the data were examined for extreme scores (outliers), as outliers can reduce the fit (accuracy) of regression models (Field, 2013). Univariate outliers were assessed using a visual examination of boxplots, and by calculating Z scores using the formula [skewness/skewness standard error]. Z scores of  $\pm 3.29$  indicate problem outliers (Field, 2013). Multivariate outliers were examined using the Mahalanobis distance procedure, in multiple regression (Tabachnick & Fidell, 2007). Any participant with multivariate outliers (i.e. a respondent who consistently reported extreme scores on multiple scales) should be deleted from the dataset. Participants reporting an

extreme score on one scale only (i.e. univariate outliers) would be excluded from the particular analysis using listwise deletion, which is the default option in most tests (Pallant, 2005).

*Table 4.3: Descriptive statistics for the 17 scale measures used in Study 1 (full sample)*

Scale Measures	N	Min	Max	Mean	SD	Skew		Kurtosis		
						Skew	SE	Z	Kurtosis	SE
Group identity	844	3.00	15.00	12.68	2.31	-1.27	.084	-15.05	1.830	.168
Social media	847	5.00	30.00	13.76	5.71	.381	.084	4.53	-.587	.168
Familiarity	844	1.00	5.00	2.63	1.09	.172	.084	2.05	-.674	.168
Collectivism	841	6.00	30.00	19.42	4.75	-.083	.084	-.99	-.221	.168
Power distance	849	7.00	34.00	15.66	5.06	.403	.084	4.81	-.032	.168
Violation perception	842	8.00	40.00	25.89	6.47	-.079	.084	-.94	-.470	.168
Happiness	840	4.00	20.00	7.93	3.83	.884	.084	1.47	-.024	.169
Worry	829	4.00	19.00	6.16	2.90	1.63	.085	19.17	2.288	.170
Anger	841	3.00	15.00	5.63	3.08	1.22	.084	14.48	.672	.168
Guilt	836	4.00	20.00	5.78	2.99	1.94	.085	22.91	3.218	.169
Sadness	843	2.00	10.00	2.89	1.64	1.99	.084	23.67	3.357	.168
Positive attributes	778	21.00	105.00	53.93	13.36	-.079	.088	-.91	.215	.175
Liking	841	2.00	10.00	4.77	1.71	.277	.084	3.29	-.205	.168
Compliance	852	2.00	10.00	5.74	2.05	-.21	.084	-2.54	-.721	.167
Move against	849	3.00	15.00	5.83	2.84	.890	.084	1.60	.076	.168
Move away	843	3.00	15.00	5.56	3.12	1.22	.084	14.54	.700	.168

Univariate outliers were identified on 12 scales, including group identity scale, familiarity scale, power distance scale, happiness scale, worry scale, anger scale, guilt scale, sadness scale, positive attributions scale, liking scale, moving away scale, and move against scale. Specifically, most of these scales contained multiple outliers. As these extreme scores are measured on a Likert scale, within an intended range, technically they are not extreme scores (Glass et al., 1972, in Field, 2013), and so were retained to show the natural variation in the data.

Following the screening process, normality was assessed using the skew/standard error  $< \pm 3.29$ , Kolmogorov-Smirnov test of normality, and frequency histograms for all continuous variables. Linearity was assessed through correlations and bivariate scatterplots which demonstrated reasonably linear relationships between the study variables (Appendix E1).

Initial comparison of UK and KSA samples on cultural identity, familiarity, group identity, collectivism and power distance variables revealed that 89.7% of KSA participants identify with Saudi culture, while 76.9% of UK participants identify with British culture (Table 4.4). In other words, the large majority in each country sample identify with their normative national culture.

Table 4.4: Differences between KSA and UK samples in culture identity variable

Sample	Culture	Frequency	%
KSA	Saudi	392	89.7
	Other	45	10.3
KSA (HE)	Saudi	228	89.4
	Other	27	10.6
KSA (HC)	Saudi	164	90.1
	Other	18	9.9
UK	British	323	76.9
	Other	97	23.1
UK (HE)	British	128	67.4
	Other	62	32.6
UK (HC)	British	195	84.8
	Other	35	15.2

Table 4.5 shows the mean scores of the differences in familiarity, group identity, collectivism and power distance variables between KSA samples and UK samples. Independent samples t-tests revealed that the UK samples UK participants were more familiar with informal email than KSA participants. KSA participants had higher collectivism and power distance than UK samples. This clearly indicate that there are some differences between the UK and KSA samples in their level of familiarity with informal email, group identity, cultural identity, collectivism and power distance which may explain the findings while testing the study hypotheses.

Table 4.5: Comparison of mean familiarity, group identity, collectivism and power distance between KSA and UK samples

Variable	Country	N	M	SD	t	p
Familiarity	KSA	431	2.30	1.00	-9.53	.001
	UK	413	2.98	1.07		
	KSA (HE)	254	2.20	0.94	-5.18	.001
	UK (HE)	190	2.69	1.06		
	KSA (HC)	177	2.45	1.06	-7.43	.001
	UK (HC)	223	3.22	1.02		
Group Identity	KSA	425	12.73	2.20	0.67	.504
	UK	419	12.63	2.42		
	KSA (HE)	250	12.96	1.95	4.35	.001
	UK (HE)	189	12.02	2.55		
	KSA (HC)	175	12.41	2.49	-3.05	.002
	UK (HC)	230	13.12	2.19		
Collectivism	KSA	423	21.54	4.44	14.59	.001
	UK	418	17.27	4.03		
	KSA (HE)	248	21.56	4.44	13.66	.001
	UK (HE)	188	16.03	3.85		
	KSA (HC)	175	21.50	4.45	7.73	.001
	UK (HC)	230	18.29	3.90		
Power Distance	KSA	429	17.53	4.91	11.74	.001
	UK	420	13.74	4.47		
	KSA (HE)	249	16.97	4.69	6.42	.001
	UK (HE)	190	14.12	4.49		
	KSA (HC)	180	18.31	5.12	10.31	.001
	UK (HC)	230	13.43	4.44		

#### 4.4 Correlation and Mediation testing

Before testing the hypotheses, correlation and mediation effects need to be assessed. Therefore, the following section tests the study's conceptual model (Figure 2.3), which hypothesised that affective reactions mediate the relationship between violation perception and behavioural reactions.

##### 4.4.1 Correlation analysis

Prior to testing the mediation effect of the affective responses and attributions, Spearman's rank correlation was performed to test the inter-correlation between the outcome variables (Appendix E). Violation perception was positively correlated with worry, anger, guilt, sadness, move against and move away, and negatively correlated with happiness, compliance, positive attributions and liking. Affective responses and attributions were also correlated with behavioural reactions (Table 4.6). There was a strong negative correlation between violation perception and compliance ( $r=-.56$ ). Worry had a strong positive relation with anger, guilt and sadness ( $r=.66$ ,  $.61$ ,  $.66$ , respectively); anger had a strong positive correlation with guilt and sadness ( $r=.59$  for both), while guilt had a strong positive relation with sadness ( $r=.56$ ) and liking was strongly correlated with positive attributions ( $r=.59$ ).

Table 4.6: Spearman's rank correlation coefficient for whole sample ( $N=849$ )

	M	1	2	3	4	5	6	7	8	9	10
1 Violation perception	25.89										
2 Happiness	7.93	-.477**									
3 Worry	6.16	.287**	.005								
4 Anger	5.63	.464**	-.241**	.659**							
5 Guilt	5.78	.257**	.019	.614**	.590**						
6 Sadness	2.89	.266**	-.079*	.655**	.593**	.562**					
7 Liking	4.77	-.400**	.311**	-.219**	-.390**	-.246**	-.214**				
8 Positive attributions	53.93	-.429**	.356**	-.126**	-.266**	-.183**	-.192**	.592**			
9 Compliance	5.74	-.564**	.420**	-.300**	-.429**	-.220**	-.306**	.427**	.392**		
10 Move against	5.83	.166**	.119**	.386**	.383**	.410**	.351**	-.186**	-.070	-.114**	
11 Move away	5.56	.242**	-.032	.366**	.440**	.342**	.304**	-.312**	-.168**	-.370**	.248**

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

##### 4.4.2 Mediation analysis

###### 4.4.2.1 Mediation effect- affective responses on compliance

Hierarchical regression results revealed that more happiness, liking and less anger were significant predictors of compliance; however, violation perception is still a strong predictor, suggesting only a partial mediation of violation perception through happiness, anger and liking (Table 4.7).

Table 4.7: Hierarchical regression results for affective responses and attributions predicting compliance in Study 1

Variable	$\Delta R^2$	$\beta$
Step 1	.333***	
Violation perception		-.577***
Step 2	.064***	
Violation perception		-.409***
Anger		-.142**
Happiness		.209***
Worry		-.063
Guilt		.026
Sadness		-.031
Step 3	.025***	
Violation perception		-.357***
Anger		-.117*
Happiness		.170***
Worry		-.062
Guilt		.046
Sadness		-.032
Positive Attributions		.058
Liking		.146***

A Sobel test (Sobel, 1982) resulted in significant findings with a Sobel statistic, suggesting that such variables mediate violation perception's prediction of compliance. Table 4.8 shows the results of the Sobel tests.

Table 4.8: Sobel tests for the effect of potential mediators on violation perception predicting compliance in Study 1

	Violation perception	Happiness	Anger	Liking
$\beta$	-.577	.170	-.117	.146
t	-19.14	5.16	-2.59	3.99
p-value	.001	.001	.01	.001
Sobel Z		-4.86	-2.59	-3.82
p-value		.001	.01	.001

#### 4.4.2.2 Mediation effect- affective responses on move against tendency

Hierarchical regression findings revealed that more anger, guilt and less happiness and liking were significant predictors of the tendency to move against the email sender; but violation perception is still a strong predictor. This suggests only a partial mediation of violation perception through anger, guilt, happiness and liking (Table 4.9).

*Table 4.9: Hierarchical regression results for affective responses and attributions predicting the move against in Study 1*

Variable	$\Delta R^2$	$\beta$
Step 1	.043***	
Violation perception		.207***
Step 2	.232***	
Violation perception		.098*
Anger		.252***
Happiness		-.167***
Worry		.055
Guilt		.180***
Sadness		.055
Step 3	.006	
Violation perception		.087*
Anger		.232***
Happiness		-.175***
Worry		.051
Guilt		.176***
Sadness		.062
Positive Attributions		.040
Liking		-.098*

\* $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

A Sobel test was calculated to test whether each of the mediators significantly carries the influence of the move against tendency. Calculations resulted in significant findings with a Sobel statistic, suggesting that more anger, guilt and less happiness and liking mediate violation perception's prediction of the move against tendency. Table 4.10 shows the results of the Sobel tests.

*Table 4.10: Sobel tests for the effect of potential mediators on violation perception predicting 'move against' in Study 1*

	Violation perception	Happiness	Anger	Guilt	Liking
$\beta$	.207	-.175	.232	.176	-.098
t	5.74	-4.77	4.59	3.66	-2.39
p-value	.001	.001	.001	.001	.02
Sobel Z		4.48	4.39	3.08	2.37
p-value		.001	.001	.002	.02

#### 4.4.2.3 Mediation effect- affective responses on the move away tendency

The path analysis results indicate that more anger and less happiness, liking and positive attributions are significant predictors, but violation perception is still a strong predictor. This suggests only a partial mediation of violation perception through happiness, anger, liking and positive attributions (Table 4.11).



*Table 4.11: Hierarchical regression results for affective responses and attributions predicting the move away in Study 1*

Variable	$\Delta R^2$	$\beta$
Step 1	.089***	
Violation perception		.299***
Step 2	.162***	
Violation perception		.147***
Anger		.392***
Happiness		-.088*
Worry		.026
Guilt		.017
Sadness		.020
Step 3	.022***	
Violation perception		.129**
Anger		.349***
Happiness		-.103*
Worry		.021
Guilt		.006
Sadness		.036
Positive Attributions		-.089*
Liking		-.195***

\* $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

A Sobel test was calculated to test whether each of the mediators significantly carries the influence of the move away tendency. Calculations resulted in significant findings with a Sobel statistic, suggesting that less happiness, liking and positive attributions and more anger mediate violation perception's prediction of the move away tendency (Table 4.12).

*Table 4.12: Sobel tests for the effect of potential mediators on violation perception predicting 'move away' in Study 1*

	Violation perception	Happiness	Anger	Liking	Positive attributions
$\beta$	.299	-.103	.349	-.195	-.089
t	8.51	-2.78	6.86	-4.73	-2.18
p-value	.001	.006	.001	.001	.03
Sobel Z		2.69	6.15	4.48	2.07
p-value		.007	.001	.001	.04

#### 4.4.2.4 Summary of the mediation findings

The findings suggest that violation perception is positively related to negative affective and behavioural responses and negatively related to positive attributions. There was also inter-correlation between outcome variables. This indicates the complex relationship between these variables, as they cannot be distinct from each other; the increase or reduction of one variable may be associated with the increase or decrease other variables. Further findings on the relationships

between the study outcome variables indicate that some strong affective responses and positive attributions might have partially predicted (mediated) the behavioural reactions.

The results revealed that more happiness, liking and less anger significantly mediated the effect of violation perception in predicting compliance, while the affective reactions of less happiness, liking, more anger and guilt mediate the relationship between violation perception and the move against tendency. The results suggest that less happiness, liking, positive attributions and more anger mediate violation perception's prediction of the move away tendency.

#### **4.5 Testing the Hypotheses**

For hypotheses 1-3, a series of hierarchical multiple regression was conducted to test the moderating and the interaction effects of the sender's culture (same culture and different culture) and sender's status (higher status, lower status and same status) on: the relationship between violation perception and affective responses (happiness, worry, anger, guilt, sadness and liking); the variables of violation perception; attributions; and the relationship between affective responses and behavioural reactions (compliance, moving against and moving away). The analysis examines the study's conceptual model (Figure 2.3), which suggests that status and culture moderate the relationship between violation perception and affective responses, and the relationship between affective responses and behavioural reactions.

##### **4.5.1 Hypothesis 1: Moderating effect of sender's culture**

Participants would make more negative attributions, show a more negative affective response, and show a more negative behavioural reaction when the email sender is of the same culture, than when the email sender is of a different culture.

###### *4.5.1.1 Moderating effect- culture on violation perception predicting affective responses*

**UK and KSA samples:** In both samples, the moderation effect of culture on the relationships between violation perception and affective responses or attributions was not supported.

**UK HE and KSA HE samples:** The results within the KSA HE sample indicate that the interaction between sender's culture and violation perception (Table 4.13) was significant ( $\beta = -.245$ ,  $p < .01$ ), ( $\Delta R^2 = .028$ ,  $F(1,239) = 7.16$ ,  $p < .01$ ), indicating that the relationship between violation perception and worry is negatively moderated by cultural similarity.

Table 4.13: Summary of hierarchical regression analysis for variables predicting worry, KSA HE

Variable	$\Delta R^2$	$\beta$
Step 1	.041**	
Violation perception		.199**
Sender's culture		-.062
Step 2	.028**	
Violation perception		.378***
Sender's culture		-.059
Violation perception x Sender's culture		-.245**

To sum up, cultural similarity negatively moderates the relationship between violation perception and the affective responses (i.e. worry) within KSA HE, suggesting same culture (in-group) favouritism within KSA HE. Sender's culture had no moderating effect in the UK HE sample.

**UK HC and KSA HC samples:** In KSA HC only (and not in UK HC) the relationship between violation perception and guilt is positively moderated by same-culture ( $\Delta R^2=.053$ ,  $F(1,157)=9.36$ ,  $p<.01$ ), ( $\beta=.338$ ,  $p<.01$ ). When the sender is the same culture, people respond to the email violation with more guilt (Table 4.14). In KSA HC, but not UK HC, the relationship between violation perception and positive attributions is positively moderated by same-culture ( $\Delta R^2=.039$ ,  $F(1,141)=7.08$ ,  $p<.01$ ), ( $\beta=.278$ ,  $p<.01$ ). Hence, when the sender is from the same culture, recipients make more positive attributions towards the email violation (Table 4.14).

Table 4.14: Moderating effect of sender's culture between violation perception with guilt and positive attributions, KSA HC

Variable	Guilt		Positive attributions	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	.060**		.180***	
Violation perception		.232**		-.424***
Sender's culture		.053		.003
Step 2	.053**		.039**	
Violation perception		-.015		-.618***
Sender's culture		.053		-.009
Violation perception x Sender's culture		.338**		.278**

In conclusion, there was same culture (in-group) favouritism within the KSA HC increasing recipient's guilt and positive attributions towards the email sender. Sender's culture did not moderate the affective responses and attributions within the UK HC.

#### 4.5.1.2 Moderating effect- culture on affective responses predicting compliance

Culture had no moderating effect on behavioural reaction of compliance in the UK, KSA, UK HE or KSA HE samples.

**UK HC and KSA HC samples:** In the KSA HC sample, but not UK HC, after controlling for violation perception, the relationship between happiness and compliance is positively moderated by

same-culture ( $\Delta R^2=.034$ ,  $F(1,157)=7.44$ ,  $p<.01$ ), ( $\beta=.259$ ,  $p<.01$ ). When the email sender is from the same culture, happiness towards the sender increases compliance (Table 4.15).

*Table 4.15: Hierarchical regression - culture moderates effect of happiness on compliance, KSA HC*

Variable	$\Delta R^2$	$\beta$
Step 1	.158***	
Violation perception		-.397***
Step 2	.093***	
Happiness		.323***
Sender's culture		-.089
Step 3	.034**	
Happiness		.140
Sender's culture		-.086
Sender's culture X Happiness		.259**

To sum up, there was also same culture (in-group) favouritism within the KSA HC increasing recipient's tendency to comply with the request when the email sender was of the same culture. Sender's culture did not moderate recipient's compliance within the UK HC.

#### *4.5.1.3 Moderating effect- culture on affective responses predicting move against tendency*

**UK and KSA samples:** In the UK sample, culture moderated the effect of anger on the move against tendency ( $\beta=.201$ ,  $p<.01$ ), ( $\Delta R^2=.015$ ,  $F(1,409)=9.25$ ,  $p<.01$ ), indicating that the relationship between anger and the 'move against' tendency is positively moderated by same-culture, therefore an anger response to a sender of the same culture increases the tendency to move against in the UK (Table 4.16). To sum up, when the sender/receiver share the same culture, higher reactions of anger increases the UK recipient's tendency to move against tendency, indicating an in-culture bias. In KSA, the moderating effect of culture on how affective reactions influence the behavioural reaction of move against tendency was not supported.

*Table 4.16: Regression - culture moderates effect of anger on moving against, UK*

Variable	$\Delta R^2$	$\beta$
Step 1	.071***	
Violation perception		.266***
Step 2	.235***	
Anger		.517***
Sender's culture		.078
Step 3	.015**	
Anger		.354***
Sender's culture		.081*
Sender's culture X Anger		.201**

**UK HE and KSA HE samples:** Sender's culture had no moderating effect on the move against tendency in the UK HE or KSA HE samples.

**UK HC and KSA HC samples:** In UK HC and KSA HC, the moderating effect of sender's culture on how affective reactions influence the behavioural reaction of the move against tendency was not supported.

#### *4.5.1.4 Moderating effect- culture on affective responses predicting move away tendency*

Sender's culture had no moderating effect on the move away tendency in any of the study samples, indicating that sender's culture does not influence (increase or decrease) the recipient's tendency to move away from the sender.

### **4.5.2 Summary of Hypothesis 1 findings (moderating effect of the sender's culture)**

It was predicted that participants would make more negative attributions, show a more negative affective response, and show a more negative behavioural reaction when the email sender is of the same culture, than when the email sender is of a different culture. Figure 4.1 shows that the sender's culture moderated (detailed below) the relation between violation perception and three outcomes (worry, guilt and positive attributions), the relationship between happiness and compliance, and also the relationship between anger and the move against tendency, thus in general these results partially support the notion that there was same-culture favouritism within the KSA sample, and same-culture bias within the UK sample.

#### *4.5.2.1 Moderating effect of culture predicting affective responses and attributions*

The sender's culture within the KSA HE negatively moderates the relationship between violation perception and affective response of worry, indicating that the sender being of the same culture reduced the feeling of worry towards the email sender. It also positively moderates the relationship between violation perception and positive attributions and guilt within the KSA HC, indicating that when the sender is of the same culture, recipients make more positive attributions towards the email sender and had more feelings of guilt. The moderating effect of culture was only found within KSA samples, demonstrating in-culture favouritism, which may be explained by cultural norms. Culture had no moderating effect on affective responses and attributions in the UK samples.

#### *4.5.2.2 Moderating effect of culture predicting compliance*

In the KSA HC sample, the relationship between happiness and compliance is positively moderated by same culture. When the email sender is of the same culture, happiness towards the sender increases compliance. Culture had no moderating effect on the behavioural reaction of

compliance in the UK samples. This result also indicates in-culture favouritism within the KSA HC sample.

#### *4.5.2.3 Moderating effect of culture predicting the move against tendency*

In the UK sample, culture moderated the effect of the affective response (i.e. anger) on the move against tendency, indicating that when the sender/recipient shares the same culture, a higher reaction of anger increases UK recipients' tendency to move against. This finding may indicate an in-culture bias in the move against tendency within the UK sample. Therefore, people from the same culture should be more formal when corresponding with UK individuals. Culture had no moderating effect on the move against tendency in the KSA sample.

#### *4.5.2.4 Moderating effect of culture predicting the move away tendency*

The sender's culture had no moderating effect on the move away tendency in any of the study samples, suggesting no substantial influence of sender's culture on increasing or decreasing the recipient's tendency to move away from the sender.

In conclusion, hypothesis 1 was partially supported for the relationship between anger and the move against tendency within the UK sample. These findings indicate an in-culture bias (in-group) and out-culture (out-group) favouritism within UK participants; thus it may be more acceptable for foreign individuals to violate communication norms than for in-culture individuals, and expectations towards same-culture senders may be higher because it is assumed that they should know more about email communication norms than those from foreign cultures (particularly non-native speakers).

These results suggest that social identity theory is somewhat outdated in this regard. Since it was first posited in the 1970s, globalization and the popularisation of the internet have softened the edges of perceptions of in-groups and out-groups based on culture; in particular, reactions to cultural out-groups are not as negative as social identity theory would suggest. Indeed, UK participants' negative reactions were stronger to in-group (same culture) violations in email communication, known as the 'black sheep' effect, whereby members of the in-group (same culture) not following in-group social norms are viewed more negatively than out-group individuals perpetrating an identical violation, which was demonstrated by this study's findings with regard to the moderating effects of sender's culture.

In contrast, the KSA participants reacted more positively (i.e. with less worry, more positive attributions and more compliance) when the email sender was from the same culture and more negatively when the email sender was from a different culture, signifying in-culture preference and an out-culture bias within the KSA samples (opposite to hypothesis 1), consistent with the social identity theory. These findings provide evidence that there are real cultural differences between the UK and KSA reactions towards norms violation by in-group and outgroup members. Although these results seem to emphasise that the sender's culture had a limited effect on the reactions to email norm violation, they also indicate that the sender's culture may play an important role in increasing or decreasing the negative reactions to email violation, which can differ according to the recipient's culture or their work sector.

A possible explanation for why a sender's culture had limited influence on the affective and behavioural reactions is because 'different culture' is too vague for recipients to draw on their existing attributions about particular cultures. It also suggests, as mentioned previously, that people do not necessarily form positive or negative reactions to perceived out-groups, who are 'different' unless they have more specific social information about those out-groups. In summary, the sender's culture might have been a more influential factor if it had been made more explicit, rather than the implicit dichotomy of same versus different culture, as the manipulation of the sender's culture (using the terms 'same culture' or 'different culture') might not have been salient enough to encourage the recipient's group identity as 'in-group or out-group membership'. Providing more explicit information about the sender's culture, such as 'the sender is Arabic, English, European', might have more strongly enhanced the recipient's social identity.

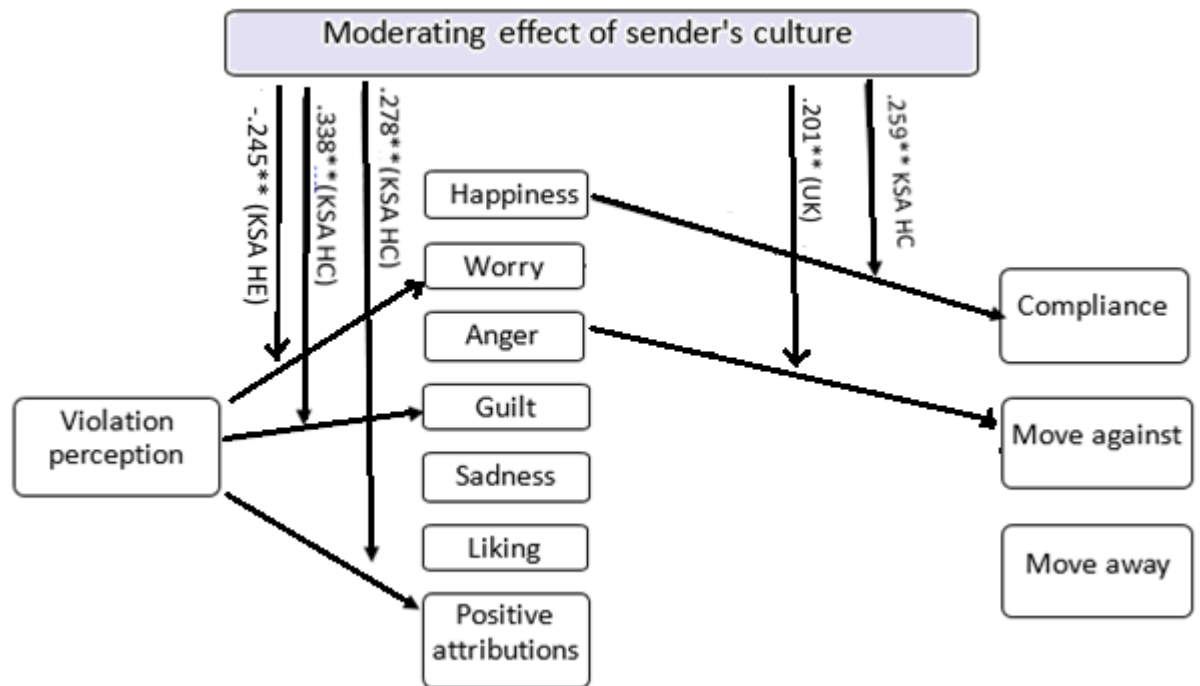


Figure 4.1: Moderating effect of sender's culture on the outcomes

#### 4.5.3 Hypothesis 2: Moderating effect of sender's status

**Hypothesis 2** predicted that participants would make more negative attributions, show a more negative affective response, and show more negative behavioural reaction when the email sender has a different status than when the sender has the same status.

##### 4.5.3.1 Moderating effect- status on violation perception predicting affective reactions and attributions

**UK and KSA samples:** The results of the hierarchical regression analysis within the KSA sample indicate that status was a significant moderator of violation perception predicting sadness (Table 4.17) ( $\beta=.169$ ,  $p<.01$ ), ( $\Delta R^2=.02$ ,  $F(1,410)=9.02$ ,  $p<.01$ ), indicating that recipients react with more sadness to the email violation when the sender is of lower status (lower status bias), compared to when the sender is from the same status (same status favouritism).

Table 4.17: Hierarchical regression testing if status moderates effect of violation perception on sadness, KSA sample

Variables	$\Delta R^2$	$\beta$
Step 1	.049***	
Violation perception		.193***
Sender's status		.094
Step 2	.020**	
Violation perception		.106
Sender's status		.078
Violation perception x Sender's status		.169**



The results within the UK sample indicate that status moderates how violation perception predicts guilt (Table 4.18) ( $\beta=.157, p<.01$ ), ( $\Delta R^2=.019, F(1,413)=8.45, p<.01$ ), indicating that UK recipients reacted with more guilt to the email violation when the sender was of higher status (higher status bias) than when the sender is from the same status (same status favouritism).

*Table 4.18: Hierarchical regression testing if status moderates effect of violation perception on guilt, UK sample*

Variables	$\Delta R^2$	$\beta$
Step 1	.047***	
Violation perception		.185***
Sender's status		.096*
Step 2	.019**	
Violation perception		.115*
Sender's status		.075
Violation perception x Sender's status		.157**

To sum up, there seems to be a lower status bias within KSA and a higher status bias within the UK, and same status favouritism in both countries in two affective responses (sadness and guilt respectively). In all samples (UK and KSA), regression tests found no significant moderation effect of sender's status on how violation perception predict attributions; or affective responses.

**UK HE and KSA HE samples:** The results of hierarchical regression analysis in the KSA HE sample reveal that the interaction between sender's status and violation perception (Table 4.19) was significant ( $\beta=.229, p<.01$ ), ( $\Delta R^2=.038, F(1,245)=10.52, p<.01$ ), indicating that the relationship between violation perception and sadness is positively moderated by lower status. To sum up, lower status positively moderates the relationship between violation perception and sadness only within the KSA HE sample, indicating a lower status bias and same status preference, as status had no moderating effect in UK HE sample.

*Table 4.19: Hierarchical regression predicting the emotional reaction of sadness, KSA HE sample*

Variable	$\Delta R^2$	$\beta$
Step 1	.084***	
Violation perception		.228***
Sender's status		.160**
Step 2	.038**	
Violation perception		.111
Sender's status		.141*
Violation perception x Sender's status		.229**

\* $p<.05$ , \*\*  $p<.01$ , \*\*\*  $p<.001$

**UK HC and KSA HC samples:** Hierarchical regression revealed that only higher status positively moderates the relationship between violation perception and guilt in UK HC (Table 4.20), ( $\Delta R^2=.035, F(1,226)=9.01, p<.01$ ;  $\beta=.211, p<.01$ ). Guilt was increased by the higher status sender and reduced by the same status sender, although status had no moderating effect in KSA HC.

Table 4.20: Regression showing moderating effect of work status on guilt and attributions, UK HC

Variable	Guilt		Positive attributions	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	.083*		.291***	
Violation perception		.226***		-.533***
Sender's status		.154*		.040
Step 2	.035**		.045***	
Violation perception		.144*		-.687***
Sender's status		.114		.060
Interaction term (IV*Moderator)		.211**		.263***

The results within UK HC reveal that the interaction between sender's status and violation perception (Table 4.20) was significant ( $\beta=.263$ ,  $p<.001$ ), ( $\Delta R^2=.045$ ,  $F(1,217)=14.53$ ,  $p<.001$ ), indicating that the relationship between violation perception and positive attributions is positively moderated by lower status. Positive attributions were raised by the lower-status sender and reduced by the same-status sender.

In conclusion, sender's status moderates the relationship of violation perception with guilt and positive attributions in the UK HC sample, indicating a higher status bias but same status preference in the affective response of guilt. The results also revealed a lower status favouritism in positive attributions. Sender's status did not moderate the relationship of violation perception with affective responses or attributions in the KSA HC sample, suggesting that affective responses and attributions were not influenced by sender's status whether higher, same or lower.

#### 4.5.3.2 Moderating effect- status on affective responses predicting compliance

Status did not moderate the behavioural reaction of compliance in HE or HC samples in both the UK and KSA samples, suggesting that the sender's status does not increase or decrease the relationship between affective responses and compliance.

#### 4.5.3.3 Moderating effect- status on affective responses predicting move against tendency

**UK and KSA samples:** In the KSA sample, status significantly moderates the effect of anger predicting moving against the email sender (after controlling for violation perception in Step 1),  $\beta=.186$ ,  $p<.01$ ,  $\Delta R^2=.024$ ,  $F(1,406)=11.08$ ,  $p<.01$ , indicating that when senders are of lower status, recipients' anger reaction significantly increases their tendency to move against (Table 4.21).

Table 4.21: Regression testing if status moderates effect of anger on moving against in KSA sample

Variable	$\Delta R^2$	$\beta$
Step 1	.035***	
Violation perception		.188***
Step 2	.074***	
Anger		.283***
Sender's status		.109*
Step 3	.024**	
Anger		.184**
Sender's status		.097*
Sender's status X Anger		.186**

Status also moderated the effect of guilt on the move against tendency,  $\beta = -.148$ ,  $p < .01$ ,  $\Delta R^2 = .017$ ,  $F(1,399) = 7.64$ ,  $p < .01$  (Table 4.22), indicating that the relationship between the affective response of guilt and the move against tendency was reduced by the higher-status sender.

Table 4.22: Regression testing if status moderates effect of guilt on moving against in KSA sample

Variable	$\Delta R^2$	$\beta$
Step 1	.036***	
Violation perception		.191***
Step 2	.049***	
Guilt		.223***
Sender's status		-.056
Step 3	.017**	
Guilt		.292***
Sender's status		-.058
Sender's status X Guilt		-.148**

To sum up, in the KSA sample, the effect of guilt on the move against tendency is reduced when the sender is higher status. In contrast, if the sender is lower status, effect of anger on the move against tendency is increased, indicating a lower status bias within the KSA sample.

However, in the UK sample, anger reaction significantly increases the tendency to move against an email sender when they have higher status than the recipient,  $\beta = .127$ ,  $p < .01$ ,  $\Delta R^2 = .013$ ,  $F(1,409) = 7.82$ ,  $p < .01$  (Table 4.23).

Table 4.23: Regression test if status moderates effect of anger on moving against in UK sample

Variable	$\Delta R^2$	$\beta$
Step 1	.071***	
Violation perception		.266***
Step 2	.235***	
Anger		.540***
Sender's status		.081
Step 3	.013**	
Anger		.489***
Sender's status		.102*
Sender's status X Anger		.127**

**UK HE and KSA HE samples:** The results of the regression analysis within KSA HE indicate that the interaction between sender's status and anger (Table 4.24) was significant ( $\beta = .228$ ,  $p < .01$ ),

( $\Delta R^2=.034$ ,  $F(1,240)=9.64$ ,  $p<.01$ ), indicating that the relationship between anger and moving against is positively moderated by lower status. In contrast, the results within KSA HE revealed that the interaction between sender's status and anger was significant ( $\beta=-.236$ ,  $p<.01$ ), ( $\Delta R^2=.039$ ,  $F(1,240)=10.69$ ,  $p<.01$ ), indicating that the relationship between anger and moving against is negatively moderated by higher status.

Table 4.24: Moderating effect of status between anger and move against tendency in KSA HE

Variable	$\Delta R^2$	$\beta$
Step 1	.040**	
Violation perception		.201**
Step 2	.074***	
Anger		.200**
Sender's status		.189**
Step 3	.034**	
Anger		.084
Sender's status		.160**
Sender's status x Anger		.228**

Moreover, the results showed that the interaction between sender's status and guilt (Table 4.25) was significant ( $\beta=-.196$ ,  $p<.01$ ), ( $\Delta R^2=.028$ ,  $F(1,238)=7.44$ ,  $p<.01$ ), indicating that the relationship between guilt and moving against is negatively moderated by higher status. In conclusion, lower status sender positively moderates the relationship between anger and the move against tendency within KSA HE, while higher status sender negatively moderates the relationship between the affective responses (i.e. anger and guilt) and the move against tendency within KSA HE, suggesting a lower status bias. Sender's status did not moderate the relationship between affective responses and the move against tendency in the UK HE sample, indicating that sender's status does not increase or decrease the recipient's tendency to move against the sender.

Table 4.25: Moderating effect of status between guilt and move against tendency in KSA HE

Variable	$\Delta R^2$	$\beta$
Step 1	.044**	
Violation perception		.209**
Step 2	.039**	
Guilt		.168*
Sender's status		-.117
Step 3	.028**	
Guilt		.272***
Sender's status		-.112
Sender's status x Guilt		-.196**

\* $p<.05$ , \*\*  $p<.01$ , \*\*\*  $p<.001$

**UK HC and KSA HC samples:** In only the UK HC sample the relationship between anger and moving against was positively moderated by higher status ( $\Delta R^2=.024$ ,  $F(1,225)=12.00$ ,  $p<.01$ ),

( $\beta=.174$ ,  $p<.01$ ). The effect of anger increasing the move against tendency was strengthened when the sender is of higher status (Table 4.26).

*Table 4.26: Moderating effect of status between anger and the move against tendency, UK HC*

Variable	$\Delta R^2$	$\beta$
Step 1	.135***	
Violation perception		.367***
Step 2	.388***	
Anger		.700***
Sender's status		.122*
Step 3	.024**	
Anger		.618***
Sender's status		.129**
Sender's status x Anger		.174**

To sum up, receiving an email from a higher status sender positively strengthens the negative effect of anger to motivate the move against tendency within the UK HC sample, suggesting a higher status bias within the UK HC alongside same status favouritism. Sender's status did not moderate the relationship between affective responses and the move against tendency in the KSA HC sample, indicating that the recipient's tendency of moving against the sender was not increased or reduced by the sender's status (whether higher, lower or same).

#### *4.5.3.4 Moderating effect- status on affective responses predicting move away tendency*

The results within the HE samples (UK and KSA) did not reveal any moderating effect of sender's status on the relationship between affective responses and the move away tendency.

**UK HC and KSA HC samples:** The results for UK HC only show that the relationship between anger and the move away tendency is negatively moderated by higher status ( $\Delta R^2=.038$ ,  $F(1,225)=12.59$ ,  $p<.001$ ), ( $\beta=-.217$ ,  $p<.001$ ) (Table 4.27). When the sender is of higher status, the tendency for anger to motivate the move away tendency is decreased.

*Table 4.27: Moderating effect of status between anger and move away tendency, UK HC*

Variable	$\Delta R^2$	$\beta$
Step 1	.146***	
Violation perception		.382***
Step 2	.144***	
Anger		.420***
Sender's status		-.037
Step 3	.038***	
Anger		.522***
Sender's status		-.047
Sender's status x Anger		-.217***

In conclusion, higher status sender (i.e. a doctor) reduced the influence of anger on the move away tendency within UK HC. Although there was a higher status bias in HC, this never caused moving

away from the sender, as sender's status did not increase or reduce recipient's tendency to move away from the sender in KSA.

Table 4.28: Independent t-test, means and standard deviations comparing lecturers and students on the study variables

Variables		KSA HE Sample					UK HE Sample				
		N	M	SD	t	p	N	M	SD	t	p
Violation	L	109	27.25	5.98	1.13	.260	95	27.51	6.30	1.95	.053
Perception	S	141	26.45	5.12			92	25.61	7.00		
Happiness	L	108	8.42	4.38	-1.88	.061	95	5.83	2.60	-6.07	.001
	S	144	9.44	4.18			95	8.47	3.35		
Worry	L	107	7.12	3.63	0.72	.471	95	5.66	2.00	0.47	.639
	S	141	6.81	3.17			93	5.52	2.28		
Anger	L	107	6.99	3.59	1.98	.049	95	5.71	3.00	2.99	.003
	S	145	6.14	3.18			93	4.51	2.47		
Guilt	L	108	7.46	3.85	1.57	.117	95	4.51	1.09	-2.26	.025
	S	142	6.75	3.34			95	5.12	2.39		
Sadness	L	110	3.41	2.00	1.85	.066	95	2.94	1.54	3.02	.003
	S	144	2.97	1.76			94	2.35	1.09		
Positive attributions	L	99	48.38	13.50	-1.42	.158	95	54.32	12.74	-2.74	.007
	S	125	50.80	12.00			91	59.53	13.16		
Liking	L	110	4.09	1.69	-0.62	.536	95	4.79	1.25	-3.38	.001
	S	143	4.22	1.69			95	5.52	1.68		
Compliance	L	110	5.95	2.05	1.36	.176	95	5.13	2.05	-2.77	.006
	S	143	5.63	1.75			93	6.00	2.27		
Move against	L	109	7.83	3.44	3.05	.003	95	4.77	2.22	0.61	.545
	S	144	6.67	2.62			94	4.59	1.91		
Move away	L	108	5.93	3.02	-1.47	.143	95	5.81	3.88	1.05	.294
	S	140	6.50	3.08			94	5.24	3.49		

L = Lecturer, S = Student

Table 4.29: Comparison of higher status (doctors) and lower status (nurses) groups in study variables in the healthcare sample

Variables		KSA HC					UK HC				
		N	M	SD	t	p	N	M	SD	t	p
Violation	D	95	24.18	6.28	1.12	.266	146	24.63	6.98	-3.91	.001
perception	N	80	23.16	5.66			84	28.37	7.00		
Happiness	D	93	9.84	3.98	0.71	.479	146	6.19	2.54	0.51	.611
	N	75	9.41	3.72			84	6.01	2.65		
Worry	D	92	6.46	3.35	0.35	.726	146	5.40	2.19	-1.81	.071
	N	71	6.28	2.88			84	6.01	2.91		
Anger	D	95	5.72	3.27	0.47	.637	146	5.23	2.72	0.79	.432
	N	76	5.49	2.98			84	4.94	2.69		
Guilt	D	93	6.78	3.79	1.76	.080	146	4.50	1.46	-2.95	.004
	N	73	5.85	2.81			84	5.24	2.34		
Sadness	D	95	3.09	1.83	0.69	.491	146	2.65	1.37	-0.94	.350
	N	75	2.91	1.67			84	2.83	1.52		
Positive attributions	D	79	55.51	12.47	-0.01	.991	142	56.53	12.06	2.79	.006
	N	68	55.53	12.83			79	51.25	15.75		
Liking	D	90	4.62	1.96	0.21	.836	143	5.10	1.44	-2.14	.033
	N	85	4.56	1.69			80	5.56	1.73		
Compliance	D	96	6.05	1.99	0.26	.795	146	5.81	2.08	1.71	.089
	N	85	5.98	1.91			84	5.31	2.21		
Move against	D	95	6.85	2.78	-0.35	.724	146	4.34	2.04	-1.24	.215
	N	82	7.00	2.76			84	4.70	2.24		
Move away	D	95	5.79	2.81	0.25	.807	146	4.63	2.80	-0.43	.664
	N	81	5.69	2.44			84	4.80	2.84		

D = Doctor, N = Nurse

Table 4.30: Regression results for recipient's status predicting the outcome variables (controlling for age), HE

Variables	KSA HE sample				UK HE sample			
	Before age control		After age control		Before age control		After age control	
	$\beta$	t	$\beta$	t	$\beta$	t	$\beta$	t
Violation perception	0.07	1.13	0.04	0.54	0.13	1.84	0.10	0.74
Happiness	-0.12	-1.88	-0.12	-1.46	-0.40	-6.02***	-0.41	-3.24**
Worry	0.05	0.72	0.01	0.18	0.02	0.32	0.13	0.92
Anger	0.12	1.98	0.08	1.03	0.21	2.94**	0.40	2.98**
Guilt	0.10	1.57	0.10	1.21	-0.16	-2.23	-0.02	-0.13
Sadness	0.12	1.85	0.05	0.57	0.22	3.06**	0.39	2.91**
Positive attributions	-0.09	-1.42	-0.16	-1.82	-0.21	-2.87**	-0.09	-0.64
Liking	-0.04	-0.62	-0.10	-1.18	-0.24	-3.38**	-0.20	-1.47
Compliance	0.09	1.36	0.12	1.41	-0.19	-2.67**	-0.08	-0.60
Move against	0.19	3.05**	0.06	0.81	0.04	0.53	0.19	1.35
Move away	-0.09	-1.47	-0.15	-1.82	0.06	0.88	0.38	2.78**

Table 4.31: Regression results for recipient's status predicting the outcome variables (controlling for age), HC samples

Variable	KSA HC sample				UK HC sample			
	Before age control		After age control		Before age control		After age control	
	$\beta$	t	$\beta$	t	$\beta$	t	$\beta$	t
Violation perception	0.08	1.12	-0.01	-0.07	-0.26	-4.00***	-0.22	-3.33**
Happiness	0.05	0.71	0.08	0.80	0.05	0.76	0.05	0.67
Worry	0.03	0.35	-0.02	-0.14	-0.12	-1.80	-0.18	-2.57
Anger	0.04	0.47	-0.02	-0.15	0.04	0.65	-0.02	-0.28
Guilt	0.14	1.76	0.00	-0.03	-0.20	-3.04**	-0.24	-3.58***
Sadness	0.05	0.69	0.03	0.27	-0.06	-0.91	-0.12	-1.69
Positive attributions	0.00	-0.01	0.05	0.42	0.20	3.00**	0.15	2.23
Liking	0.02	0.21	0.06	0.62	-0.14	-2.13	-0.11	-1.59
Compliance	0.02	0.26	0.04	0.40	0.11	1.68	0.10	1.42
Move against	-0.03	-0.35	0.07	0.67	-0.08	-1.25	-0.13	-1.93
Move away	0.02	0.25	-0.02	-0.23	-0.03	-0.42	-0.08	-1.10

#### 4.5.3.5 The effect of recipient's status

**UK HE and KSA HE samples:** Table 4.28 shows the independent t-test results, means and standard deviations comparing HE lecturers and students on the study variables. As can be seen, there is a different pattern of significant t-test results for UK HE and KSA HE. Within the KSA HE, lecturers tended to react with more tendency to move against the email sender, as compared with their respective students. Within the UK HE, lecturers had more negative emotions (more anger and sadness) than students, but the students reacted more positively (more happiness, liking, positive attributions and more compliance) than the lecturers.

Lecturers were on average several years older than the students ( $t=21.87$ ,  $p<.001$ ). Therefore, to control the effect of age on the previous results, further analyses (multiple regressions) were conducted to examine the differences between the lecturers and the students while controlling for age. Results of multiple regression showed that when controlling for age, there were no longer significant differences between lecturers and students in the move against tendency within the KSA

HE (Table 4.30). Regression results also revealed that there were no longer differences between lecturers and students in liking, positive attributions and compliance, but the students still had more happiness than lecturers and lecturers still had more anger, more sadness and become more tendency to move away the sender within the UK HE (Table 4.30). This indicates that higher-status recipients had stronger negative affective reactions (less happiness, more anger, and more sadness, more move away tendency) to the email than lower-status recipients within the UK HE only. The reactions of the recipients were influenced by their status. The affective responses were similar for the KSA HE lecturers and students.

***UK HC and KSA HC samples:*** The t-test results (Table 4.29) reveals some significant differences between doctors and nurses in the UK, but not KSA. UK nurses perceived significantly more violation than UK doctors. UK nurses also felt more guilt than doctors. Doctors had more positive attributions for the sender than nurses. Recipients' status in KSA HC does not seem to affect their affective and behavioural reactions. However, because there is a significant age difference between doctors and nurses ( $t=6.36$ ,  $p<.001$ ), displaying that doctors were on average older than the nurses, further analyses were performed. The multiple regression controlling for age revealed that the differences (mentioned above) between nurses and doctors in the UK HC are still significant for violation perception and guilt (Table 4.31). The findings show that lower-status recipients (nurses) appear to perceive more violation and react with a more negative response (guilt) than higher-status recipients (doctors) in UK HC. This indicates that recipients' status may affect their reactions to email violation. However, violation perception, affective and behavioural reactions were similar for KSA doctors and nurses.

#### **4.5.4 Summary of Hypothesis 2 findings (moderating effect of sender's status)**

It was predicted that participants would make more negative attributions, show a more negative affective response, and show a more negative behavioural reaction when the email sender has a different status than when the sender has the same status. Figures 4.2-3 shows that the sender's status had a more significant moderating effect (detailed below) on the behavioural reactions than it did on the affective responses and positive attributions.

##### ***4.5.4.1 Moderating effect of status predicting affective reactions and attributions***

In the UK HC, the relationships between violation perception and positive attributions were increased by lower status, whereas the relationship between violation perception and guilt was increased by higher status, indicating a high-status bias but same-status preference in the affective



response of guilt and lower-status favouritism in positive attributions within the UK HC. In contrast, the relationship between violation perception and sadness was increased by lower status within the KSA HE, indicating a lower-status bias but same-status preference. There was no further significant moderating effect of the sender's status. This indicates a limited moderating effect of the sender's status on the relationships between violation perception and affective responses or attributions.

#### *4.5.4.2 Moderating effect of status on affective responses predicting compliance*

Sender's status had no moderating effect on the relationship between affective responses and compliance in the KSA and UK samples.

#### *4.5.4.3 Moderating effect of status predicting the move against tendency*

Lower status positively moderates the relationship between anger and the move against tendency, but higher status negatively moderates the relationship between the affective responses (i.e. anger and guilt) and the move against tendency within KSA HE. This indicates that lower status increases the move against tendency and higher status decreases the move against tendency within the KSA HE sample. This result indicates a lower-status bias compared to the same-status or higher-status sender in the KSA HE sample. Therefore, the email sender who is of lower status should be more formal when corresponding with higher-status individuals. Providing information about the email sender being of lower status enhances the offensive action tendencies. In contrast, receiving an email from a higher-status sender positively strengthens the tendency for the negative affective reaction of anger to motivate the move against tendency within the UK HC sample. The moderating effect of the sender's status was only between some affective responses (i.e. anger, guilt) with the move against tendency. Participants were more likely to move against the higher-status sender but less likely to move against the same-status sender within the UK sample, and less likely to move against the higher-status sender but more likely to move against the lower-status sender within the KSA sample.

#### *4.5.4.4 Moderating effect of status predicting the move away tendency*

The relationship between the affective response of anger and the move away tendency was negatively moderated by higher status within the UK HC. This indicates that the sender's status may decrease the tendency to move away from the sender. A higher-status sender reduces the tendency to move away from the sender within the UK HC but not UK HE. The differences between the two sectors (HE, HC) within the UK, possibly due to differences in organisational culture, may

explain these findings. Status had no moderating effect on the move away tendency in the KSA samples.

In conclusion, the findings (Figures 4.2-3) demonstrated that the sender's status moderated the relationship between violation perception and only three outcomes (guilt, sadness, and positive attributions) and the relationship between affective responses (anger and guilt) and the behavioural reactions of move against and move away tendencies. Hypothesis 2 was partially supported for guilt and the move against tendency in the UK sample (specifically in HC). Same-status sender reduced the effect of violation perception on the affective response of guilt and the effect of anger on the move against tendency (same-status preference and a higher-status bias). The moderating effect of sender's status on the relationship between violation perception and positive attributions and the relationship between anger and the move away tendency did not support hypothesis 2, showing lower-status and higher-status (but not same-status) favouritism, respectively.

Hypothesis 2 was also partially supported for sadness in KSA sample (specifically in HE). Same-status sender reduced the effect of violation perception on the affective response of sadness only (same-status preference and a lower-status bias). The moderating effect of sender's status on the relationship between affective responses (anger and guilt) and the move against tendency did not support hypothesis 2, indicating higher-status (but not same-status) favouritism and lower-status bias. This suggests that participants had higher expectations of writing quality from lower-status individuals, while poor writing quality was viewed as more acceptable from individuals of the same or higher status. This may indicate a lower-status bias within KSA and KSA HE samples.

The findings therefore indicate that the effect of the sender's status may depend on the recipient's cultural background, country and work sector. A lower status sender may be more vulnerable in a high power distance culture, which can result in a lower status person becoming a target for negative reactions by high status or more powerful individuals. In contrast, the same-status sender may be perceived more favourably by email recipients in both the UK and KSA. Although the findings regarding the moderating effects of the sender's status were limited, they do indicate that the sender's status does have an influence on the reactions to email norm violation, generally indicating a lower status bias within the KSA (specifically in the HE), and a higher status bias within the UK (specifically in the HC).

*The effect of participant's status:* After controlling for age of participants because of the significant differences in age between students and lecturers and between doctors and nurses, the results indicate that there were some significant differences between high-status and lower-status recipients within the UK samples. In the UK HE, higher-status recipients (lecturers) reacted more negatively than lower-status (students) recipients, but in the UK HC lower-status recipients (nurses) reacted more negatively than did higher-status recipients (doctors). No differences were found between the reactions of higher-status and lower-status recipients in the KSA samples.

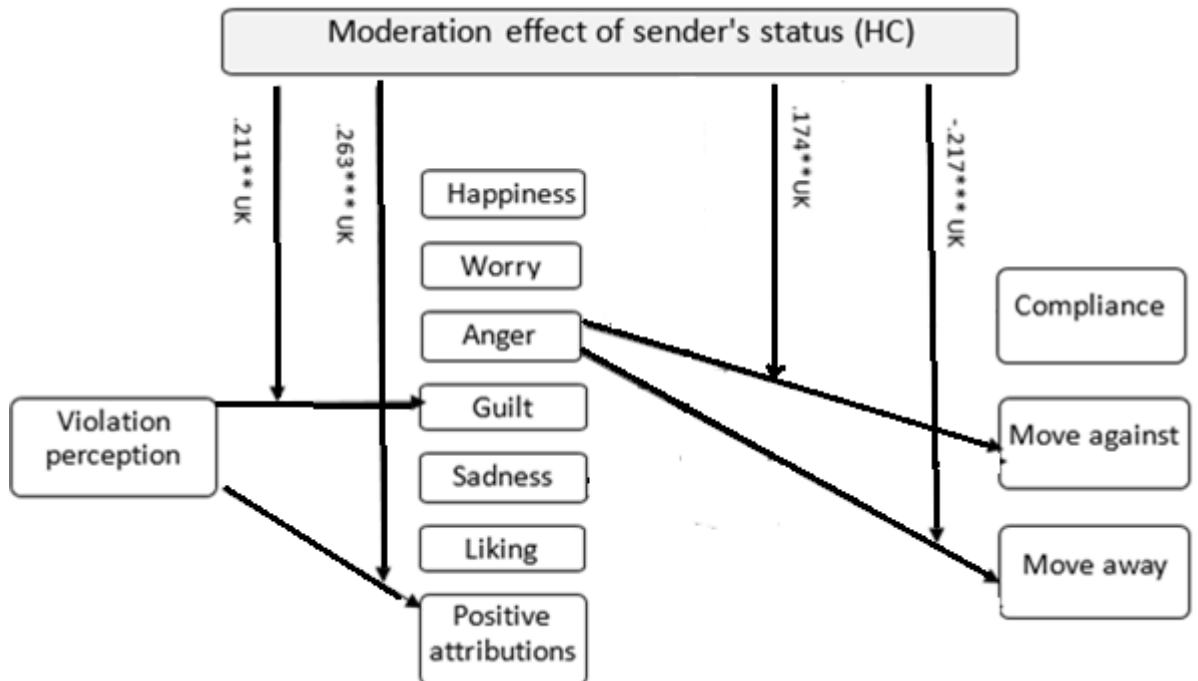


Figure 4.2: Moderating effect of sender's status on the outcomes in HC

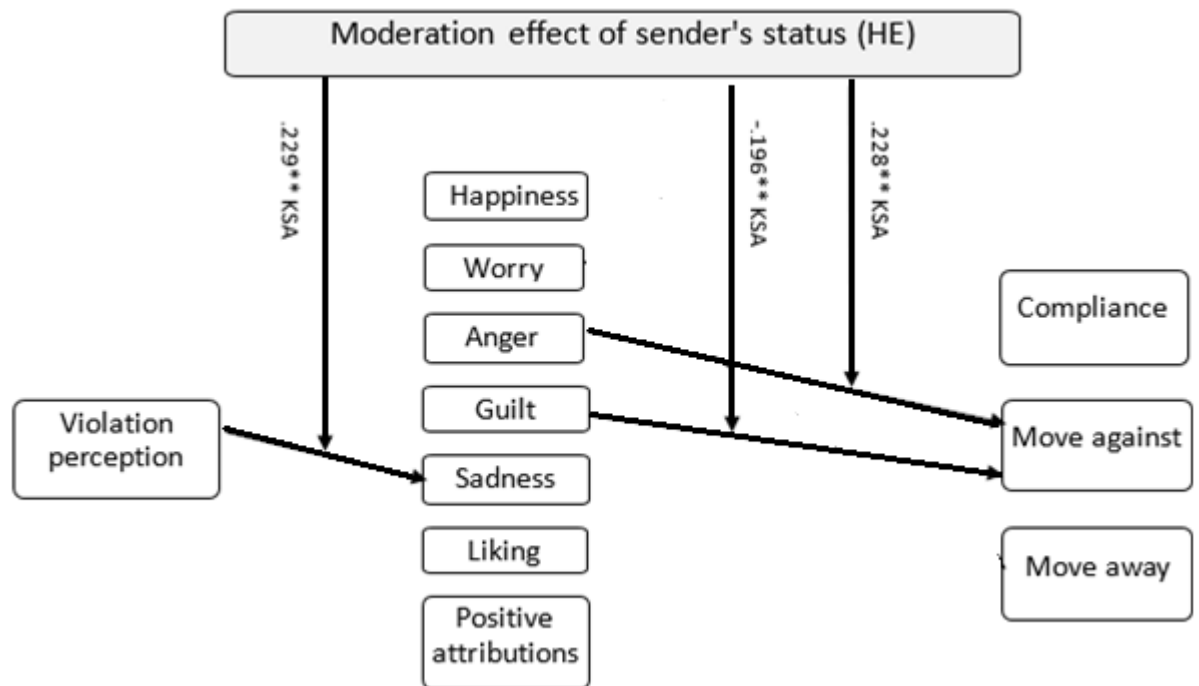


Figure 4.3: Moderating effect of sender's status on the outcomes in HE

#### 4.5.5 Hypothesis 3: interaction effect of sender's culture and status

**Hypothesis 3** predicted that participants would make more negative attributions (H3a), show a more negative affective response (H3b), and show a more negative behavioural reaction (H3c), when the sender has a different status and the same culture than when the sender has the same status and different culture.

##### 4.5.5.1 Hypothesis 3a: interaction effect- culture and status on attributions

**UK and KSA samples:** The results of hierarchical regression analysis revealed a significant interaction effect of sender's status and sender's culture on positive attributions within the KSA sample (Figure 4.4),  $\beta = .231$ ,  $p < .01$ , ( $\Delta R^2 = .023$ ,  $F(2,360) = 21.58$ ,  $p < .01$  (Table 4.32), indicating that individuals made higher positive attributions when they read the email sent by a same-status sender of a different culture than when they read the email sent by a person of the same culture and lower status (i.e. same status was favoured over same culture). Hypothesis 3a was confirmed.

Table 4.32: Hierarchical regression testing the interaction effect of culture and status on positive attributions in KSA sample

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.193***			
Violation perception		-.406	-8.48	.000
Sender's status		-.137	-2.69	.008
Sender's culture		.000	.010	.992
Step 2	.023**			
Violation perception		-.395	-8.31	.000
Sender's status		-.289	-4.10	.000
Sender's culture		-.148	-2.19	.029
Culture * Status		.231	3.07	.002

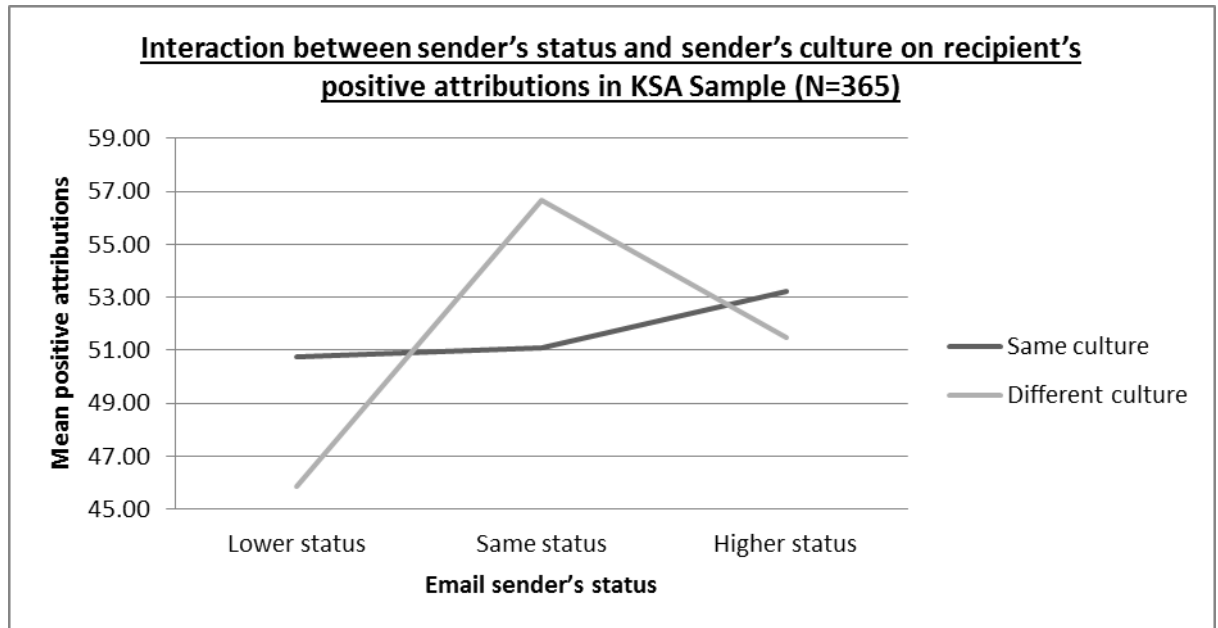


Figure 4.4: Interaction between sender's status and sender's culture on recipient's positive attributions, KSA (N=365)

In conclusion, Hypothesis 3a was confirmed in the KSA sample only, indicating that participants made significantly more positive attributions when the sender was of a different culture and the same status compared with when the sender was of the same culture and different status. Hypothesis 3a was not supported in the UK sample, indicating no differences in positive attributions when the sender was of the same culture and different status compared with different culture and same status.

**UK HE and KSA HE samples:** A significant interaction effect of sender's status and culture on positive attributions within the KSA HE sample was found,  $\beta=.295$ ,  $p<.01$ ,  $\Delta R^2=.033$ ,  $F(2,218)=4.40$ ,  $p<.05$ , showing that individuals made more positive attributions when they read an email sent from a sender of the same status and different culture than when the sender was of lower status and same culture (suggesting a lower status bias) (Figure 4.5). Hypothesis 3a was partially confirmed, for KSA HE (Table 4.33).

Table 4.33: Hierarchical regression testing the interaction effect of culture and status on positive attributions in KSA HE

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.166***			
Violation perception		-.348	-5.49	.000
Sender's status		-.183	-2.70	.007
Sender's culture		-.008	-.13	.896
Step 2	.033*			
Violation perception		-.333	-5.31	.000
Sender's status		-.371	-4.02	.000
Sender's culture		-.185	-2.02	.045
Culture * Status		.295	2.94	.004

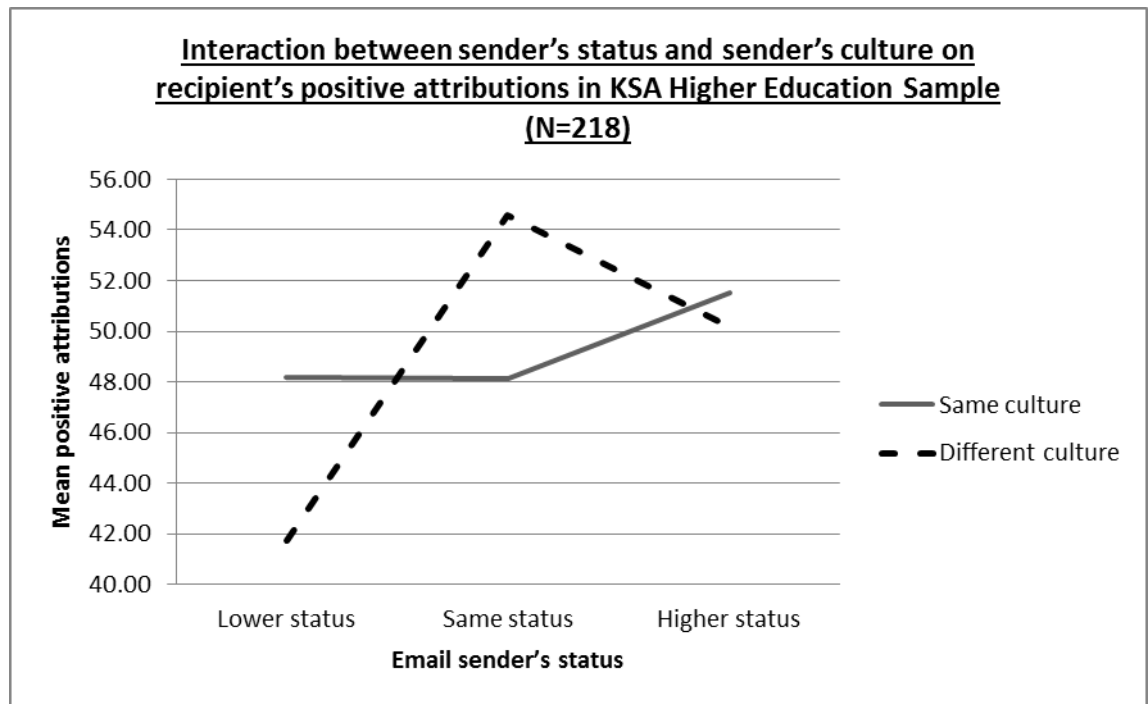


Figure 4.5: Interaction between sender's status and sender's culture on recipient's positive attributions, KSA HE (N=218)

Within the UK HE sample, there was an interaction effect of sender's status and sender's culture on positive attributions,  $\beta = -.281$ ,  $p < .05$ ,  $\Delta R^2 = .031$ ,  $F(2, 180) = 3.27$ ,  $p < .05$ , revealing that individuals made higher positive attributions when the sender was same-status and different culture than lower-status sender and same culture (Figure 4.6). Hypothesis 3a was partially confirmed for UK HE (Table 4.34).

Table 4.34: Hierarchical regression testing the interaction effect of culture and status on positive attributions in UK HE

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.136***			
Violation perception		-.289	-4.10	.000
Sender's status		.090	1.23	.220
Sender's culture		-.085	-1.22	.224
Step 2	.031*			
Violation perception		-.289	-4.14	.000
Sender's status		.271	2.67	.008
Sender's culture		.051	.54	.589
Culture * Status		-.281	-2.55	.012

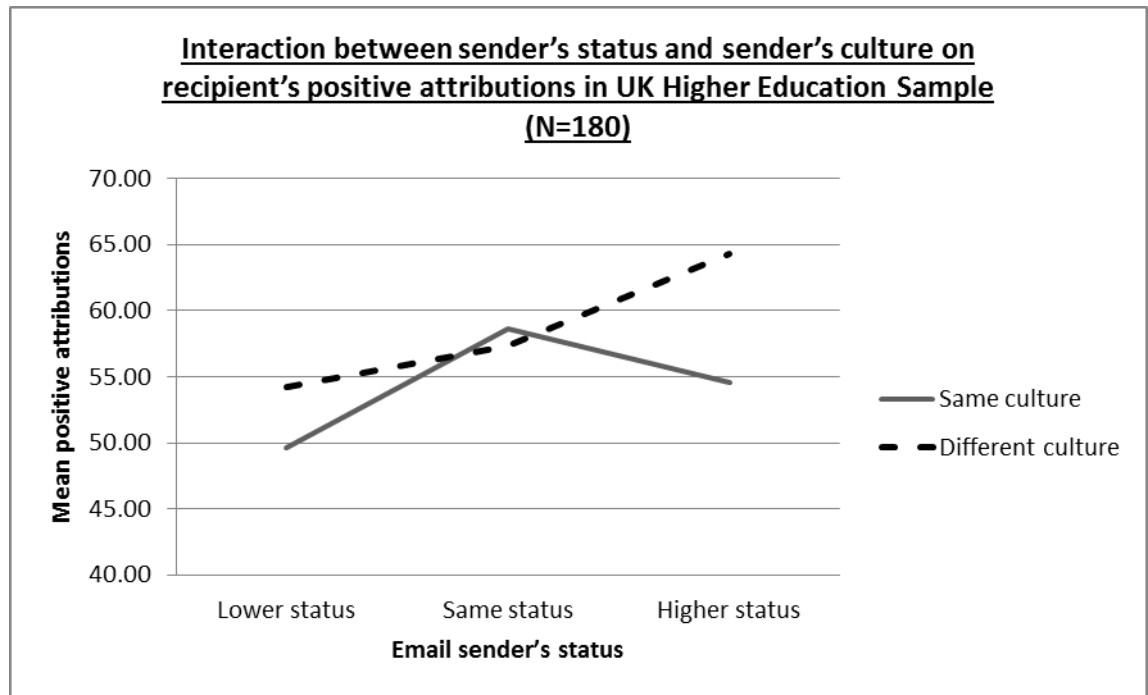


Figure 4.6: Interaction between sender's status and sender's culture on recipient's positive attributions, UK HE (N=180)

**UK HC and KSA HC samples:** There was no significant interaction effect of culture and status on attributions towards the sender in either the UK sample or the KSA sample. Attributions were similar, regardless of culture or status of the sender. Hypothesis 3a was not supported in HC samples.

#### 4.5.5.2 Hypothesis 3b: interaction effect- culture and status on affective responses

**UK and KSA samples:** There was a significant interaction effect of sender's status and sender's culture on guilt within the UK sample (Figure 4.7),  $\beta=.158$ ,  $p<.05$ ,  $\Delta R^2=.018$ ,  $F(2,414)=4.16$ ,  $p<.05$ , indicating that respondents who read the email sent by a higher-status sender of the same culture were significantly more likely to experience guilt than the respondents who read the email sent by a sender of the same culture but of lower status (Table 4.35). In conclusion, despite the significant interaction, the results showed that Hypothesis 3b was not supported, as participants did not significantly show more worry, anger, guilt and sadness, or less happiness and liking when the

sender was of the same culture and different status, as compared with when the sender was of a different culture and the same status within the UK and KSA samples, indicating that the interaction between sender's status and sender's culture did not change the recipient's affective reactions.

Table 4.35: Hierarchical regression testing the interaction effect of culture and status on guilt in UK sample

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.070***			
Violation perception		.178	3.73	.000
Sender's status		.048	.95	.344
Sender's culture		.066	1.39	.165
Step 2	.018*			
Violation perception		.184	3.87	.000
Sender's status		-.058	-.82	.412
Sender's culture		.052	.78	.434
Culture * Status		.158	2.11	.036

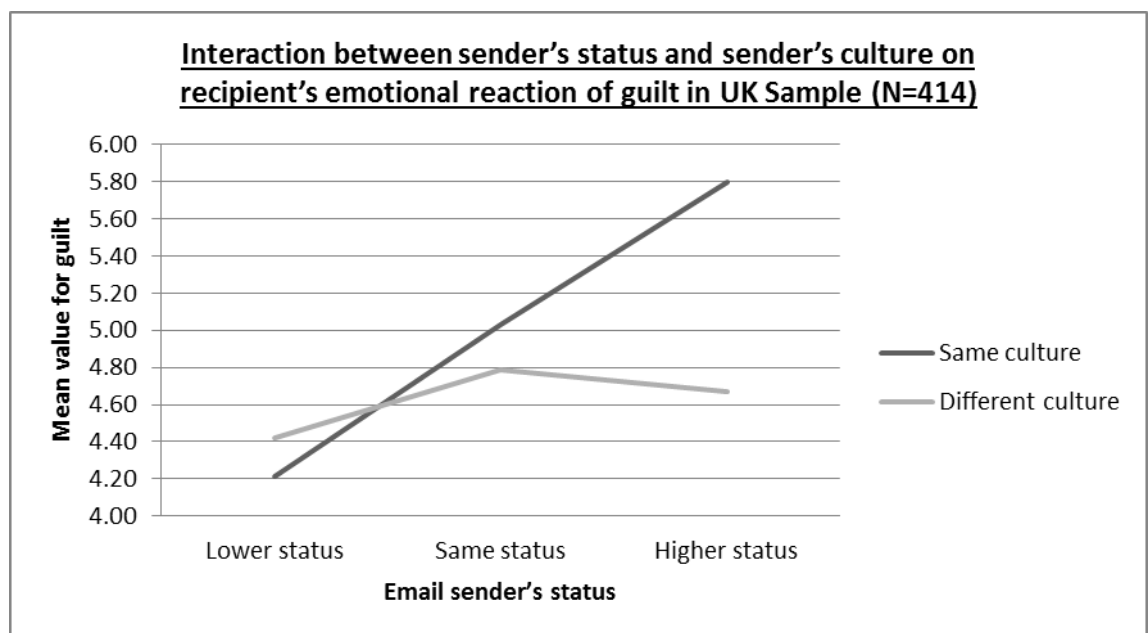


Figure 4.7: Interaction between sender's status and sender's culture on recipient's emotional reaction of guilt, UK (N=414)

**UK HE and KSA HE samples:** There was no interaction effect of culture and status on all affective responses (happiness, liking, sadness, anger, worry, guilt) in either the UK HE sample or KSA HE sample. Therefore, Hypothesis 3b was rejected, indicating no differences in affective responses when the sender was of same culture and different status compared with different culture and same status in HE samples.

**UK HC and KSA HC samples:** The results discovered a significant interaction effect of sender's status and sender's culture on guilt (Figure 4.8) within the UK HC sample only, ( $\beta=.266$ ,  $p<.01$ ), ( $\Delta R^2=.038$ ,  $F(2,224)=4.90$ ,  $p<.01$ ), indicating that individuals who read the email sent by a sender of higher status and the same culture were significantly more likely to experience guilt than



individuals who read the email sent by a sender of the same status and a different culture (Table 4.36). Hypothesis 3b was partially confirmed, but only for guilt in the UK HC sample. Hypothesis 3b was also not supported for the KSA HC, indicating no differences in affective responses when the sender was of same culture and different status compared with different culture and same status.

Table 4.36: Hierarchical regression testing the interaction effect of culture and status on guilt in UK HC

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.104***			
Violation perception		.210	3.28	.001
Sender's status		.109	1.62	.108
Sender's culture		.070	1.10	.271
Step 2	.038**			
Violation perception		.215	3.42	.001
Sender's status		-.072	-.77	.444
Sender's culture		.019	.21	.833
Culture * Status		.266	2.68	.008

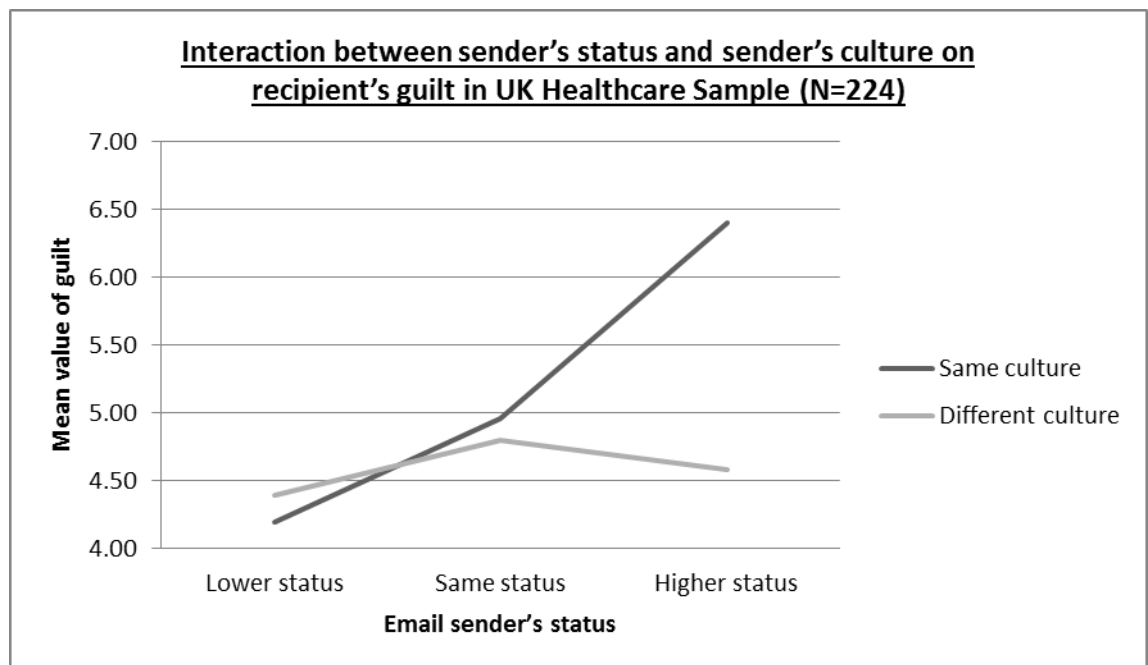


Figure 4.8: Interaction between sender status and culture on recipient's guilt, UK HC (N=224)

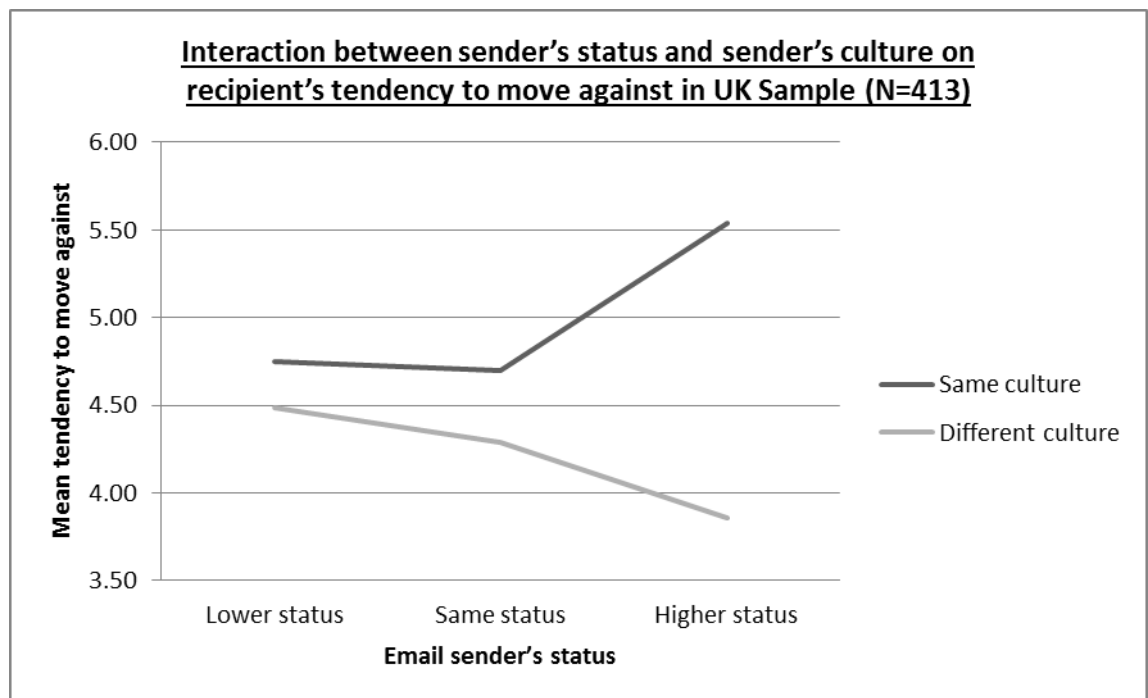
#### 4.5.5.3 Hypothesis 3c: interaction effect- culture and status on behavioural reactions

**UK and KSA samples:** A significant interaction effect was found of sender's status and sender's culture on the move against tendency (Figure 4.9) within the UK sample ( $\beta=.200$ ,  $p<.01$ ), ( $\Delta R^2=.019$ ,  $F(2,413)=4.46$ ,  $p<.05$ ), signifying that individuals who read the email sent by a higher-status sender of the same culture were significantly more likely to move against the email sender than individuals who read the email sent by the same-status sender of a different culture (Table 4.37).

In conclusion, Hypothesis 3c was partially confirmed with participants significantly tend to 'move against' the sender when the sender was of the same culture and different (higher) status compared with when the sender was of a different culture and the same status within the UK sample. Hypothesis 3c was not supported for compliance and the move away tendency in the UK sample. Furthermore, all the three behavioural reactions were not supported for the KSA sample, indicating that the recipient's behavioural reactions did not vary by the interaction of the sender's status and culture.

*Table 4.37: Hierarchical regression testing the interaction effect of culture and status on move against in UK sample*

Variables	$\Delta R^2$	$\beta$	<i>t</i>	<i>p</i>
Step 1	.088***			
Violation perception		.258	5.43	.000
Sender's status		.014	.28	.780
Sender's culture		.127	2.69	.007
Step 2	.019*			
Violation perception		.264	5.61	.000
Sender's status		-.118	-1.70	.089
Sender's culture		.071	1.08	.282
Culture * Status		.200	2.70	.007



*Figure 4.9: Interaction between sender's status and sender's culture on recipient's tendency of move against, UK Sample (N=413)*

**UK HE and KSA HE samples:** Contrary to expectations, there was no interaction effect between culture and status on all three behavioural reactions (compliance, move away, and move against) in the UK HE sample and the KSA HE sample. Therefore, Hypothesis 3c was not supported, with

no differences in the behavioural reactions concerning the interaction between the email sender's status and sender's culture within the HE samples.

**UK HC and KSA HC samples:** There was no significant interaction effect of culture and status on the behavioural reactions of compliance, move against or move away tendency in UK sample or KSA sample. Therefore, Hypothesis 3c was not supported, with no differences in the behavioural reactions relating to the interaction between the email sender's status and sender's culture within the HC samples.

#### *4.5.5.4 Summary of Hypothesis 3 findings (sender's culture and status interaction effect)*

It was predicted that participants would make more negative attributions (H3a), show a more negative affective response (H3b), and show a more negative behavioural reaction (H3c), when the sender has a different status and the same culture than when the sender has the same status and different culture.

**Attributions:** Hypothesis 3a was confirmed for positive attributions in the KSA HE and UK HE samples. Individuals made more positive attributions when the email sender was the same status and different culture, and made less positive attributions when the email sender was the same culture but lower status. Hypothesis 3a was not supported, with no significant differences in attributions between the participants who read an email sent by a person who was of the same status and different culture compared with participants who read an email sent by a person who was of a different status and the same culture, in the UK HC and KSA HC samples.

**Affective reactions:** The findings indicate that Hypothesis 3b was supported for guilt only within the UK HC sample, with a significant difference between participants in guilt when the sender was of the same culture and higher status compared with when the sender was of a different culture and the same status. Hypothesis 3b was rejected with no interaction effect of culture and status on all affective responses in either the KSA HC sample or HE samples.

**Behavioural reactions:** Contrary to expectations, there was no interaction effect between culture and status on all three behavioural reactions (compliance, move away, move against) across all samples. Hypothesis 3c was not supported except for a significant difference that was found whereby participants were more likely to move against the sender who was of the same culture and higher status compared with when the sender was of a different culture and the same status, supporting hypothesis 3c within the full UK sample.

In conclusion, the results show that Hypothesis 3 did not have adequate support from the findings (with only a few significant results) across all samples. Overall, the findings indicate that cultural background and work status may cancel each other out. The out-group bias effect related to status (different status) was not enhanced by the in-culture bias (same culture). The findings did not support the notion of the interaction effect of the sender's status and culture on the recipient's reactions to email norm violation, as such interaction did not influence the mediators and the outcome variables, demonstrating that the moderating effect of the sender's status or culture was more important than their interaction effect.

#### 4.5.6 Hypothesis 4: collectivism/ individualism and power-distance

**Hypothesis 4** predicted that higher collectivism and higher power distance participants would react more strongly in terms of attributions, affective reactions, and behavioural reactions, than lower collectivism and lower power-distance participants.

To test Hypothesis 4, Pearson correlations were performed to examine the magnitude of relationships between collectivism, and power distance. The results revealed that collectivism was positively correlated with power distance ( $r(841) = .21, p < .01$ ). Since there was a significant positive correlation between collectivism and power distance, partial correlations were conducted to test the correlations between these two cultural variables and affective and behavioural reactions and also to disentangle which of these cultural dimensions is more important.

*Table 4.38: Partial correlation (2-tailed) for collectivism and power distance with the study outcomes (N=857)*

Outcome Variables	Collectivism Control Variable: Power distance	Power distance Control Variable: Collectivism
Happiness	.159**	.164**
Worry	.101**	.079
Anger	.089	.030
Guilt	.140**	.137**
Sadness	.038	.004
Compliance	.088	.006
Move against	.182**	.101**
Move away	-.036	.076
Positive attributions	-.018	.002
Liking	-.021	-.013

\*\* . Correlation is significant at the 0.01 level. \* . Correlation is significant at the 0.05 level.

The results of partial correlation (Table 4.22) show that there was a significant positive correlation between collectivism and happiness, worry, guilt and the move against tendency when controlling for power distance. The results also display that there was a significant correlation between power distance and happiness, guilt and the move against tendency when controlling for collectivism. These results indicate that individuals with higher collectivism experienced more happiness, worry,

guilt and tended to react by moving against the email sender than did lower-collectivism individuals. Individuals with higher power distance experienced more happiness, guilt and a tendency to move against the email sender than did others with low power distance.

Regression analyses were further conducted to test the differences in the outcome variables between high and low collectivism when controlling for power distance and between high and low power distance when controlling for collectivism.

*Table 4.39: Regression results for collectivism and power distance predicting the outcome variables*

	High/Low Collectivism			High/Low Power distance		
	$\beta$	t	P	$\beta$	t	p
Happiness	.161	4.645	.000	.186	5.361	.000
Worry	.081	2.243	.025	.083	2.303	.022
Anger	.083	2.326	.020	.037	1.030	.304
Guilt	.125	3.541	.000	.146	4.144	.000
Sadness	.030	.833	.405	.025	.682	.495
Compliance	.075	2.112	.035	.013	.375	.708
Move against	.163	4.659	.000	.121	3.470	.001
Move away	-.033	-.920	.358	.086	2.402	.017
Positive attributions	-.014	-.386	.699	.001	.018	.986
Liking	-.016	-.439	.660	-.005	-.136	.892

The results (Table 4.23) show that when controlling for power distance, there were a significant difference between high and low collectivism. High collectivism participants experienced significantly more happiness, guilt, and move against tendency than lower collectivism participants ( $p < .001$ ). Therefore, Hypothesis 4 was partially confirmed in terms of affective responses (i.e. happiness, and guilt) and the behavioural reaction (i.e. moving against), indicating that high collectivism participants reacted more strongly than their low collectivism counterparts (Table 4.23).

The results also indicate that when controlling for collectivism, there were a significant difference between low and high power distance. High power distance participants reported significantly more happiness, guilt and move against tendency than low power distance participants (at  $p < .01$ ). Therefore, Hypothesis 4 was also partially supported in terms of affective responses (i.e. happiness, and guilt) and the behavioural reaction (i.e. moving against), indicating that high power distance participants reacted more strongly than lower power distance (Table 4.23).

#### *4.5.6.1 Comparison of participant country (UK vs KSA)*

As stated at the beginning of this chapter (Table 4.5), KSA participants showed higher collectivism and higher power distance than the UK participants. In addition, it was also demonstrated in this

section that participants with high collectivism or high power distance reacted more strongly than those with low collectivism and low power distance (Hypothesis 4 was partially supported). Therefore, further analyses to compare between participants from the two countries in the affective and behavioural reactions were conducted.

Independent samples t-tests (two-tailed) were performed to compare mean differences in the variables between participants in UK and KSA. Table 4.24 presents the independent samples t-test results. The findings show that participants from KSA were significantly more likely to experience happiness, worry, anger, guilt and sadness than participants from the UK. They were also more likely to move against and move away than participants from the UK. However, the UK participants were significantly more likely to positively attribute and to express more liking towards the email sender than the participants from KSA (Table 4.24).

Regression analyses were also performed to test these differences in the outcome variables but when controlling for familiarity and the use of social media. The results also showed similar findings, even if familiarity and social media use were controlled for, indicating that there may be some other effective factors that can be considered in future research.

*Table 4.40: Independent t-test comparing the UK and KSA participants in net sample*

Variables	Country	M	SD	t
Happiness	KSA	9.26	4.13	10.78**
	UK	6.59	2.95	
Worry	KSA	6.72	3.29	5.62**
	UK	5.61	2.34	
Anger	KSA	6.14	3.31	4.88**
	UK	5.12	2.75	
Guilt	KSA	6.78	3.52	10.25**
	UK	4.79	1.87	
Sadness	KSA	3.10	1.83	3.71**
	UK	2.68	1.40	
Positive attributions	KSA	52.02	12.96	-3.82**
	UK	55.66	13.49	
Liking	KSA	4.34	1.76	-7.64**
	UK	5.21	1.54	
Compliance	KSA	5.87	1.92	1.98
	UK	5.60	2.16	
Move against	KSA	7.07	2.93	14.28**
	UK	4.57	2.10	
Move away	KSA	6.04	2.90	4.57**
	UK	5.07	3.26	

#### **4.5.7 Summary of Hypothesis 4 findings (collectivism and power distance)**

The findings show that Hypothesis 4 was partially supported for high and low collectivism, and also partially supported for high and low power distance. The differences were in three mutual reactions (happiness, guilt and move against). Hypothesis 4 was not supported for the other outcome

variables. These findings indicate that people are expected to be more formal when emailing more collectivistic and higher-power-distance cultures, because they are more emotionally aroused and have more negative behavioural reactions towards perceived email violations than those from less collectivistic and lower-power-distance cultures. Cultural norms may explain these differences between the two samples.

KSA participants experienced stronger reactions of happiness, worry, anger, guilt, and sadness, and were more likely to move against/away from the email sender than UK participants. In contrast, UK participants were more likely to attribute positively and express more liking towards the email sender than KSA participants. In other words, KSA participants tended to react more strongly and more negatively towards email violation than UK participants. In conclusion, although collectivism and power distance affect reactions to email norm violations, there may also be other cultural differences between participants that play another role in influencing their reactions. Such cultural differences were mentioned in the introduction chapter in this thesis.

#### **4.6 Chapter conclusion**

The findings show that hypothesis 1 (moderating effect of sender's culture) was partially supported for the behavioural reaction of move against tendency only in the UK sample. Same-culture negative bias was evident in the UK sample, producing more tendency to move against an email sender when the sender was same culture as receiver. In contrast, hypothesis 1 was opposed by the KSA participants reacting more favourably (with less worry, more positive attributions and more compliance) towards the same culture sender (same-culture favouritism and out-culture bias). Moreover, hypothesis 2 (moderating effect of sender's status) was partially supported for guilt and the move against tendency in the UK sample (specifically in HC). Same-status sender reduced the effect of violation perception on the affective response of guilt and the effect of anger on the move against tendency (same-status preference and a higher-status bias).

Hypothesis 2 was also partially supported for sadness in the KSA sample (specifically in HE). Same-status sender reduced the effect of violation perception on the affective response of sadness only (same-status preference and a lower-status bias). A possible explanation is that the status differential (i.e. in-group/out-group differential) between lecturers (higher status) and students (lower status) differs, and may be less pronounced between doctors/nurses, as students are non-

professionals. The lower status effect was not found when both groups were professionals (e.g. doctor/nurse).

Furthermore, hypothesis 3 (interaction effect of sender's culture and status) was partially supported. A few significant interaction effects on study outcomes of status and culture of email sender were noted (HE and HC samples). However, the interaction of status and culture had a limited influence on the affective and behavioural reactions, as they may cancel each other out. In additions, hypothesis 4 (high and low collectivism and power distance comparison) was partially supported. Individuals self-reporting higher collectivism attitudes had stronger negative emotional and behavioural reactions than those with lower collectivism attitudes. Individuals self-reporting higher power distance attitudes had stronger negative emotional and behavioural reactions than those with lower power distance attitudes. Similarly, the KSA sample had stronger negative emotional and behavioural reactions than the UK sample. Findings differed between countries (UK and KSA), possibly due to cultural differences, which were somewhat explained by differences in high collectivist/high power distance attitudes. The findings indicate the importance of the status and culture of both the sender and recipient affecting the latter's reaction to email violation.

The study model (Figure 2.3) predicts behavioural reactions to an email violation, as a function of emotional reactions and attributions, moderated by the status and culture of both the email sender and receiver. The relationship between violation perception and the behavioural reaction of compliance was partially mediated by the affective responses (more happiness, liking and less anger). Moreover, the behavioural reaction of the tendency to move against the email sender was partially mediated by the affective responses of more anger, guilt, and less happiness and liking. The tendency of moving away from the sender was found to be partially mediated by the affective responses of more anger, and less happiness, liking and positive attributions.

The violation perception influences these affective responses and attributions towards the email sender, which are moderated by the status/culture of sender/receiver. These initial reactions then influence the behavioural outcomes in terms of how people respond to the email sender, by either complying with their request, moving away from the sender, or moving against them, which are also moderated by the status/culture of sender and receiver. The model was partially supported in the general indication of the importance of both status and culture as potential moderators of the reactions to email norm violation; that the sender's status is more influential than the recipient's status; and that the sender's culture is more powerful than the recipient's culture.



The results were very different in each of the two sectors (healthcare, higher education). Repeated replication of this study would be needed to determine if these sector differences in reactions to email communication as a function of status/culture of sender and receiver are real sector effects. It is also suggested that the results could be different in other sectors not included in this study, such as banking and finance, government, non-international business, leisure and hospitality, manufacturing, construction etc. While one might assume different findings in the public and private sectors, this study found differences even among public sector services, in higher education and healthcare.

Psychological research traditionally aims to develop natural laws based on findings which are universally applicable. However, this study shows that findings can differ between countries and even between sectors within country, which makes it difficult to develop a coherent universal model to explain how culture and status influence email communication, due to the myriad factors that contribute to outcomes. More extensive explanations, implications and limitations of these findings and recommendations for future research are addressed in the discussion and conclusion chapters. The following chapter presents the methods used in Study 2.

## 5 Study 2 Methods

Study 2 further examines the impact of the six varying email communications (as per Study 1), testing additional moderating variables of global identity, local identity, personality (extraversion and emotional stability), dispositional and organisational trust for a new sample setting of international business professionals (not specifically UK or Saudi). The rationale for including these additional moderating variables on this particular sector is that global versus local identity is directly relevant to the context of international business, however personality traits and trust were not considered in Study 1, thus they are included in this study in order to address this gap. Study 1 focused more on the impact of the email sender's characteristics (social information provided), extending previous research (McGoldrick, 2011; Vignovic & Thompson, 2010). Study 2 (the present study) also measures the email recipient's characteristics (e.g. trust, personality), to address research gaps, as email involves two-way communication, thus both sender and recipient characteristics are mutually influential on the recipient's behavioural reactions.

### 5.1 Study 2 - Design

Tables 5.1 & 5.3 show six experimental conditions, which were identical to those used in Study 1.

*Table 5.1: Six experimental conditions varying email sender's work status and culture*

Email sender's culture	Email sender's status		
	Same	Lower	Higher
Same	(1) Same culture and same status	(2) Same culture and lower status	(3) Same culture and higher status
Different	(4) Different culture and same status	(5) Different culture and lower status	(6) Different culture and higher status

#### 5.1.1 Study conceptual model

Table 5.2 summarises the variables measured in both Study 1 and Study 2, to clarify the differences between them, and to show how Study 2 extends the Study 1 research.

Table 5.2: Comparison of Research Design for Study 1 and Study 2 samples, groups, IV, DVs, mediators and moderators

	STUDY 1	STUDY 2
Sample	Higher education, healthcare	International business
Groups	Lecturers and students, doctors and nurses	Company employees (managers, supervisors, staff)
IV	Email message content	Email message content
DV	Behavioural reactions	Behavioural reactions
Mediators	Emotional reactions	Emotional reactions
	Attributions	Attributions
	Liking	Liking
Moderators	1) Sender culture	1) Sender culture
	2) Sender status	2) Sender status
	3) Recipient culture	3) Recipient culture
	A) Recipient collectivism	A) Recipient collectivism
	B) Recipient power distance	B) Recipient power distance
	4) Recipient status	4) Recipient status
	N/A	5) Recipient personality traits (extraversion, emotional stability)
	N/A	6) Recipient trust (dispositional trust, organisational trust)
	N/A	7) Recipient identity (global identity, local identity)

Table 5.3: Six different email vignette conditions that participants were randomised to receive

SIX INTERNATIONAL BUSINESS STUDY GROUPS RECEIVED SIX EMAIL VIGNETTE CONDITIONS		
Email sender's status	Email Sender's Culture	
	Same Culture	Different Culture
Lower status	<b>Condition 1 (Lower Status/Same Culture):</b> You have received the following email from a person who is LOWER PROFESSIONAL STATUS than you and from the SAME CULTURAL BACKGROUND as you.	<b>Condition 4 (Lower Status/Different Culture):</b> You have received the following email from a person who is LOWER PROFESSIONAL STATUS than you and has a DIFFERENT CULTURAL BACKGROUND from you.
Same status	<b>Condition 2 (Same Status/Same Culture):</b> You have received the following email from a person who has the SAME PROFESSIONAL STATUS and the SAME CULTURAL BACKGROUND as you.	<b>Condition 5 (Same Status/Different Culture):</b> You have received the following email from a person who has the SAME PROFESSIONAL STATUS as you and has a DIFFERENT CULTURAL BACKGROUND from you.
Higher status	<b>Condition 3 (Higher Status/Same Culture):</b> You have received the following email from a person who is HIGHER PROFESSIONAL STATUS than you and from the SAME CULTURAL BACKGROUND as you.	<b>Condition 6 (Higher Status/Different Culture):</b> You have received the following email from a person who is HIGHER PROFESSIONAL STATUS than you and has a DIFFERENT CULTURAL BACKGROUND from you.

## 5.2 Study 1 - Participants

### 5.2.1 Target population

The inclusion criteria for the target population for Study 2 were participants who currently work in international business anywhere in the world, within one of the three target organisations (i.e. InterContinental Hotels Group (IHG), the Saline Conversion Corporation (SWCC) in Saudi Arabia and its international collaborative partners, and Saybolt Saudi Arabia Ltd.), employed in position of manager, supervisor, or staff (including trainees, internships, expatriate assignees), who must have an organisation email account; any gender, any age group, any ethnicity, any nationality, who have

intermediate English to understand and complete the English language questionnaire. To assess participants' level of English, they were asked to indicate their level of English, whereby self-rated fluent and intermediate respondents were kept, and those professing beginner proficiency were eliminated.

The three organisations were selected for inclusion because they represent three important and diverse sectors (hospitality, oil and gas and water and power utilities), making them conducive to the generalization of study results for organisations in international business environments. In addition, although these three organisations are located in Saudi Arabia, they are also international, multicultural and collaborating with other international organisations. English language is also widely spoken and used in these organisations.

### **5.2.2 Sampling strategy**

A non-random purposive sampling strategy was used to recruit eligible participants, based on the inclusion criteria described previously. Branch managers in middle or higher positions in the three international companies who were personally known to the researcher agreed to circulate email invitations to all internal staff within their own branch, and possibly other branches (local and global). Employees have access to their email accounts during the work day, and Saudi managers (gatekeepers) provided the researcher with a written letter confirming that they would give their staff permission to complete the survey. A non-random sample can reduce the external validity of the findings, a randomized stratified sample was considered, but deemed unfeasible, as it would only have been possible if branch managers had full access to the entire staff, which is restricted by senior management. The total number of participants completing the full questionnaire within each of the six experimental conditions was tracked by the researcher through the survey's host website (limesurvey.com).

### **5.2.3 Participant characteristics**

Appendix F1 presents the sample characteristics for the international business sample in Study 2. The total sample (N=744) included 555 males (74.6%) and 189 (25.4%) females. Their average age was 33 years (SD=8.51, range: 20-64 years). In terms of educational qualifications, the majority of participants held a Bachelor's degree (30%). In terms of ethnicity, most participants were Arab (55.6%). In terms of main region worked, most participants worked in the Asia region (72.2%). The country of work varied, but most participants (74.2%) were born in their country of work. Cultural identity also varied, with 55.6% of the participants describing their cultural identity as

Arab. Most participants were non-native English speakers (84.5%), and the vast majority worked full-time (86.6%). Their main working areas varied, although more participants worked in administration (19.8%) or customer services (16.3%), rather than other working areas. As far as occupational position, five categories of occupation were included in this sample, including upper management (7.3%), middle management (14.4%), junior management (28.5%), supervisors (28.5%) and administrator staff (21.4). In terms of email sender's culture, 51.5% of the participants had the same culture as the email sender, and 48.9% had a different culture. Finally, in terms of email sender's status, 37.4% of the participants had higher status, 28.8% had the same status, and 33.9% had a lower status than the email sender.

### **5.3 Study 2 - Measures**

The Study 2 participants (international business managers and staff) received an amended questionnaire, which extended the Study 1 questionnaire by including new measures for global identity, local identity, dispositional trust, organisational trust and two personality traits (extraversion, emotional stability), and included a revised demographic questionnaire to make it more relevant to the Study 2 sample characteristics. The reliability of each measure used in Study 2 is reported in Table 5.8 (below). The survey questionnaire is presented in Appendix B2. As the Study 2 questionnaire was 100% English language, there was no need for translation or back-translation.

#### **5.3.1 Demographic questionnaire**

A revised demographic questionnaire measured participants' socio-demographic variables, including gender, education, ethnicity, region and country of work, cultural identity, language, full-time or part-time work, main area of work, occupational position, supervising other people and the primary area of employment.

#### **5.3.2 Use of email and social media**

Identical to the Study 1 questionnaire (see page 120).

#### **5.3.3 Group identification scale**

The group identification developed by Gordijn et al. (2006), and used in Study 1 (see page 121), was slightly amended, as shown in Table 5.4 (below).

Table 5.4: Changes made to scale items

Items used in Study 1	Items used in Study 2
Being a lecturer/student/doctor/nurse is a key aspect of who I am	Being in my current profession is a key aspect of who I am
I identify with other lecturers/students/doctors/nurses	I identify with other people from the same profession
Being a lecturer/student/doctor/nurse means a lot to me	Being in my current profession means a lot to me

#### 5.3.4 Cultural values

These were identical to the Study 1 questionnaire (see page 121).

#### 5.3.5 Email vignette

The email vignette used in Study 1 was slightly amended to make it relevant to the target population in Study 2. Figures 5.1-2 (below) summarise the changes made to the email vignette, presenting original Study 1 vignette and then the Study 2 version. The sentence of 'I'm working on **a project**' was used in the Study 2 instead of 'I'm working on **a research project**' (in the higher education study) or 'I'm working on a **patient case study**' (in the healthcare study).

Hi  
How r u? i'm working on **a research project** (in the higher education study)/ **a patient case study** (in the healthcare study) you might be interested in. Free 2 dicsus that together next Monday?  
Cheers!

Figure 5.1: Study 1 – email vignette received by participants (higher education, healthcare)

Hi  
How r u? i'm working on **a project** you might be interested in. Free 2 dicsus that together next Monday?  
Cheers!

Figure 5.2: Study 2 – Amended email vignette received by participants (international business)

The following measures were used in Study 1 and Study 2. To reduce replication, please see pages 123 to 125 (Study 1) for further details of these measures:

- Violation perception
- Emotional reactions
- Liking
- Familiarity perception
- External attributions
- Internal (positive) attributions
- Behavioural reactions

### **5.3.6 New measures included in Study 2**

#### *5.3.6.1 Global identity*

The global Identity scale (Table 5.5) was developed by Erez and Shokef (Erez & Gati, 2004; Shokef & Erez, 2006, 2008). It consists of ten items, using a five-point Likert type scale (1 not at all; 5 very much). The items measure the individual sense of belongingness to the global context (e.g. "I relate to people from other parts of the world as if they were close acquaintances/associates"). The items measure a person's identification levels or sense of belongingness to the global community. The scale reliability alpha coefficient for the total sample was .85.

#### *5.3.6.2 Local identity*

Local identity is the belonging or identifications with the national community in which an individual was born and grown up (Drori, Hollerer & Walganbach, 2014). Shokef and Erez (2006) indicated that local identity tightens the acceptance of cultural varieties, leading to classifying individuals of the same culture as the in-group and individuals of other cultures as the out-group. Local identity may negatively influence the reactions to out-group members.

Local identity is measured by the Local Identity Scale, developed and authenticated by Erez and Shokef (Erez & Gati, 2004; Shokef & Erez, 2006; 2008). This measure contains five items, using a five-point Likert type scale (1 = not at all; 5 = very much) to measure individuals' sense of belongingness to their local communities and the level and strength of the attachment they feel towards the societies with which they are affiliated. The scale reliability alpha coefficient for the total sample was .88. Table 5.5 (below) shows more details about the scale. Global and local identity scales were constructed based on previous validated measures used and created by a number of authors as shown in Table 5.5.

#### *5.3.6.3 Personality traits (Big Five)*

Personality traits were measured using the 10-Item Personality Inventory (TIPI) (Gosling, Rentfrow & Swann, 2003). Each of the 10 items were rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The 10 items are shown below. Big five personality traits (i.e. openness, conscientiousness, extraversion, agreeableness, and emotional stability) scale were constructed based on previous validated measures used and created by a number of authors as shown in Table 5.6.

Table 5.5: Global identity and local identity scales construction

Original statement	Cronbach's Alpha (a)	Adapted Statement for this study
Global Identity Scale (Erez et al., 2013)		
I see myself as part of the global international community I feel a strong attachment towards the world environment I belong to I would define myself as a citizen of the global world I relate to people from other parts of the world as if they were close acquaintances/associates I feel a strong attachment towards people from all around the world	.85	Used original statements by Erez et al., (2013)
Local Identity Scale (Erez et al., 2013)		
I see myself as part of my society (e.g. American) I feel a strong attachment towards the society, I belong to. I define myself as a ____ (your nationality- e.g. Israeli, American, Korean, etc.) I relate to people from my country as if they were close acquaintances/associates I feel a strong attachment towards people from my country	.88	I see myself as part of my community I feel a strong attachment towards the community, I belong to. I define myself as a member of my community. I relate to people from my community as if they were close acquaintances/associates I feel a strong attachment towards people from my community

Table 5.6: Big five personality traits scale construction

Original statement	Cronbach's Alpha (a)	Adapted Statement for this study
Ten-Item Personality Inventory (TIPI) (Gosling et al., 2003)		
I see myself as: Extraverted, enthusiastic. I see myself as: Critical, quarrelsome. I see myself as: Dependable, self-disciplined. I see myself as: Anxious, easily upset. I see myself as: Open to new experiences, complex. I see myself as: Reserved, quiet. I see myself as: Sympathetic, warm. I see myself as: Disorganised, careless. I see myself as: Calm, emotionally stable. I see myself as: Conventional, uncreative.	.72	Used original statements by Gosling et al. (2003)

#### 5.3.6.4 Trust

##### ➤ Disposition (propensity) to trust scale

Propensity to trust measure focuses on a generalized trust of others-something akin to a personality trait that a person would presumably carry from one situation to another (Farris, Senner & Butterfield 1973; Mayer et al., 1995). Propensity or disposition to trust (Robert et al., 2009) will be measured with seven items which were modified to reflect subjects' perception of general trust in others (Jarvenpaa et al., 1998; Mayer et al., 1996, Robert et al., 2009), Cronbach's alpha = .86. Each of the seven items will be rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Propensity to trust is regarded as a trait that indicates to a generalized expectation about the trustworthiness of others (Mayer et al., 1995). Propensity can be understood as general willingness to trust other individuals (Mayer et al., 1995), also called disposition to trust (Robert et al., 2009). It



is a 'generalized attitude' learned from both personal experience and through the observed behaviour of others, particularly parents (Rotter, 1967). Previous literature indicates that propensity trust is general trust and scales of propensity to trust or general trust measure the same characteristic. The below measure will be used in the study of email communication within international companies. This measure has been used in virtual team and in an online context (e.g. Jarvenpaa et al., 1998; Mayer et al., 1995, Robert et al., 2009).

➤ *Organisational trust scale*

This study will use the measure of trust in an organisation developed by Robinson and Rousseau (1994), Robinson (1996), Tan and Tan (2000), Whitener (2001), Deery, Iverson and Walsh (2006), Dietz and Hartog (2006), Dulac et al. (2008), Montes and Irving (2008), Restubog et al. (2008), Cronbach's alpha = .90. This scale is the most common one for measuring trust in the organisation. Therefore, the scale will be used in this study to measure the effect of trust in the organisation on the reactions to email communication. The scale consisting of 7 items assesses employees' degree of trust in their employers. A 1 to 5 scale was used, where 1 = strongly disagree, and 5 = strongly agree. Responses were coded such that a high score would indicate a high degree of trust in one's employer. Organisational trust and dispositional trust scales were constructed based on previous validated measures used and created by a number of authors, as shown in Table 5.7.

Table 5.7: Trust scales construction

Original statement	Cronbach's Alpha (a)	Adapted Statement for this study
<b>Organisational trust (Robinson &amp; Rousseau, 1994)</b>		
I am not sure I fully trust my employer. My employer is open and upfront with me. I believe my employer has high integrity. In general, I believe my employer's motives and intentions are good. My employer is not always honest and truthful. I don't think my employer treats me fairly. I can expect my employer to treat me in a consistent and predictable fashion.	.90	Used original statements by Robinson and Rousseau (1994)
<b>Disposition to trust (Jarvenpaa, Knoll &amp; Leidner, 1998)</b>		
One should be very cautious when working with foreign students. Most foreign students tell the truth about the limits of their knowledge. Most foreign students can be counted on to do what they say they will do. If possible, it is best to avoid working with foreign students on projects. Most foreign students are honest in describing their experience and abilities. Most foreign students answer personal questions honestly. Most foreign students are very competent in terms of their studies.	.86	One should be very cautious when working with people. Most people tell the truth about the limits of their knowledge. Most people can be counted on to do what they say they will do. If possible, it is best to avoid working with people on projects. Most people are honest in describing their experience and abilities. Most people answer personal questions honestly. Most people are very competent.

## 5.4 Pilot Study

The revised questionnaire for Study 2 was piloted among three university academics, to ensure the survey instructions, question items and item response formats were appropriate, relevant, clear and comprehensive, and that the survey length was acceptable for use in an online survey, and the questionnaire looked professional, and was easy for participants to complete. They suggested shortening the questionnaire slightly; changing the order of the scales presented in the questionnaire; and adding some demographic questions to profile the international business participants better. These changes were implemented by the researcher, and the revised questionnaire was approved by the pilot participants and project supervisor.

## 5.5 Reliability and Validity of Study 2 Measures

### 5.5.1 Reliability internal consistency (Cronbach's alpha)

Table 5.8 shows the reliability (internal consistency) for all measures used in Study 2, using Cronbach's alpha. The external attributions scale was dismissed in the study analysis because the scale has poor reliability ( $\alpha=.50$ ).

Table 5.8: Study 2 Reliability coefficient

Scale	Items	$\alpha$	Scale	Items	$\alpha$
1 Group identity	3	0.69	14 Violation perception	8	0.87
2 Use of social media	7	0.66	15 Happiness	4	0.83
3 Power distance	7	0.77	16 Worry	4	0.80
4 Collectivism	6	0.74	17 Anger	3	0.81
5 Extraversion	2	0.91	18 Guilt	4	0.88
6 Agreeableness	2	0.78	19 Sadness	2	0.79
7 Conscientiousness	2	0.78	20 External attributions	5	0.50
8 Emotional stability	2	0.93	21 Positive attributions	25	0.92
9 Openness	2	0.69	22 Liking	2	0.86
10 Global identity	5	0.87	23 Compliance	2	0.72
11 Local identity	5	0.88	24 Move against	3	0.72
12 Organisational trust	7	0.71	25 Move away	3	0.75
13 Dispositional trust	7	0.76			

$\alpha$ = Cronbach's alpha

### 5.5.2 Internal validity

Internal validity refers to whether the measures/scales used in the study accurately measure what they are intended to measure. Some methods to assess the internal validity of scales include face (expert), content, construct, convergent, divergent and discriminant validity. For Study 2, the validity of each scale was assessed using face and content validity. Face validity was assessed in the pilot study by three psychology academics who confirmed its good face validity, as it was clear from the instructions and question items in each scale what each scale was measuring. Content validity was assessed using Spearman rank-order correlation analysis, which found highly significant correlations between every single item and its respective composite scale, for each measure used in Study 2. Other forms of validity (e.g. construct and divergent/convergent validity) were reported as good in previous research, as all scales used in this study are standardised validated measures.

### 5.5.3 External validity

External validity refers to the degree to which the study findings are generalizable to the target population under study (i.e. other managers/employees in other global organisations). External validity can be increased by using a large, representative sample from study population. As this study sampled from three professional sectors (hotel, oil and gas, water and power), the results will be more representative of people working in these industries, rather than other global industry sectors (e.g. finance, manufacturing, aviation, telecommunications, etc.).

## 5.6 Procedure

The researcher received three letters from the three target companies, authorising the researcher to undertake data collection among staff and managers employed at each company, using the

online questionnaire, for a period of 12 weeks, from December 2014 to February 2015. Next, the invitation emails were sent to the three managers from IHD (Director-Jeddah Branch), from SWCC (Branch Manager) and from Saybolt (Director of Public Relations). The managers circulated these emails to their internal staff (including managers, supervisors and others) within their local branches, and where possible to other national and international branches. During the data collection period, the managers in the three companies circulated a reminder email to the internal staff to increase the response rate once a week, over a four-week period. As the study design includes six experimental conditions, there are six versions of the questionnaire. On a weekly basis, the researcher opened the completed online questionnaires, to check that they were fully completed, and to ensure that the quota required for each experimental group was being achieved (i.e. 35 participants per experimental condition).

There were no queries from either the three Saudi managers or any of the participants, suggesting that there were no problems with the survey administration and completion. The online survey tool does not contain any employee identification details such as the name, address, phone number and employee number. For instance, the survey instrument does not have a code (such as a serial number) on it to ensure that it cannot be traced back to identify specific respondents. Another important issue is that distribution of the online survey will be done on independent software. This helped in enhancing respondent confidence. The process of returning the survey offers no way of enabling someone to identify the person who took the survey. For example, an independent site (Limesurvey.com) was used, where responses are submitted anonymously.

Although the survey could be conducted 100% online, the researcher chose to visit Saudi Arabia during the data collection period, and met with each of the manager's face-to-face in their company. The researcher was insistent in persuading each manager to continuing circulating the reminder emails, to increase the response rate; and in particular, the Crown Plaza Hotel was visited over 10 times, and the oil and gas, and water and power utilities companies were each visited twice. Once the survey was closed (at the end of February 2015), the researcher exported the survey data from Lime Survey to SPSS for coding and statistical analysis.

## **5.7 Ethical considerations**

The researcher followed the BPS Ethical Guidelines for Conducting Research with Human Subjects, and stored all data collected from participants was stored securely on a password-

protected computer in accordance with the UK Data Protection Act (1998). An ethical approval was also obtained from the Ethics Committee at the University of Roehampton (Appendix B5). All surveys were completed anonymously and voluntarily, with 100% confidentiality, at the participants' discretion, after they were briefed, by reading and having understood the purpose of the study and their participation, and before they were randomised to one of six conditions. Their answers in the survey were not associated with their work email addresses in any way, as they completed all questions online on the Lime Survey website, so their organisation would have no access to their survey responses. Participants were required to provide an anonymous participant code at the beginning of the survey. The participants were informed they had the right to withdraw from the study at any time and discard their personalized codes for their quiz responses in the process, without penalty.

Participants indicated their informed consent by ticking a radio button before proceeding, as is standard procedure when using online surveys. By indicating consent, online participants were able to complete the survey. When participants clicked on the survey link, the computer randomised them to complete one of the six conditions. Participants were informed that they could abstain from answering any part(s) of the questionnaire, and that they could request for their data to be withdrawn at any time after participation in the study by contacting the investigator or the director of the study using their anonymous participant code. However, no participant asked to withdraw from the study. A standard debriefing page appeared at the end of the online survey questionnaire. The following chapter presents the findings of Study 2.

## 6 Study 2 Results: International Business

### 6.1 Overview

This chapter provides analyses and tests results of the Study 2 hypotheses. The total sample (N=744) included 555 males (74.6%) and 189 (25.4%) females. Details about the sample characteristics for the international business sample and the descriptive statistics (mean, standard deviation, range) for the psychometric scale measures used in the study were presented in Appendix F. Table 6.1 summarises the participants in each experimental condition (according to the email sender status and cultural background). Appendix D2 shows how data were analysed.

*Table 6.1: Breakdown of the Study 2 entire sample across six experimental conditions*

Sender's status	Sender's culture	Number of participants
Lower	Same	132
	Different	120
Same	Same	112
	Different	102
Higher	Same	136
	Different	142

### 6.2 Response Rate

For the online survey of international business professionals, a total of 3100 number of invitations were sent, receiving 962 responses. Of these, 218 were incomplete (with missing data exceeding 20%), thus they were discarded, leaving 744 complete questionnaires for the analysis (a response rate of 24%). The response rates are discussed in more detail in the discussion chapter.

### 6.3 Normality Testing and Descriptive Statistics

Table 6.2 shows the descriptive statistics (mean, standard deviation, minimum and maximum scores, skewness and kurtosis) for all continuous variable psychometric measures used in Study 2. There was no problem with missing data. The assumption of linearity was met, and there was no problem with multicollinearity, as all correlations between the Study 2 psychometric variables were below .8 (see correlations in Appendix G). The assumption of homogeneity of variance was checked for each independent sample's t-test. Table 6.2 shows that the assumption of normality for performing parametric statistical tests was largely met in Study 2, as the majority of skewness values were below the threshold of  $\pm 1$ , and all of the kurtosis values were well below the threshold of  $\pm 3$ , which indicates a reasonably normal distribution for all Study 2 psychometric variables (Field, 2013). Inspection of the boxplots for presence of outliers revealed that eight of the psychometric

scales showed some minimal outliers, which is not a problem; however, the Emotional Stability scale showed numerous outliers, high and low, indicating there was a large variation in the emotional stability scores in the total Study 2 sample. As previously mentioned in Study 1, any extreme score on an ordinal 1-5 Likert scale is not technically an extreme score, as it is within the scale range, and was therefore retained in the data to reflect the natural variation in participant's responses.

*Table 6.2: Mean, standard deviation and range for psychometric scales in full sample*

Psychometric Scales	Mean	SD	Min Score	Max Score	Skewness	Kurtosis
Familiarity	2.73	1.16	1	5	.147	-.844
Social media use	25.2	7.22	7	42	-.001	-.360
Group identity	11.48	2.86	3	20	-.704	.131
Power distance	18.13	5.08	7	32	.133	-.297
Collectivism	17.21	4.72	6	30	-.030	-.240
Global identity	16.93	4.52	5	25	-.337	-.295
Local identity	11.46	4.43	5	25	.633	.059
<b>Trust</b>						
Organisational trust	21.58	4.7	7	35	.090	.180
Dispositional trust	21.63	4.84	7	35	.090	.180
Violation perception	24.14	7.1	8	40	.025	-.496
<b>Personality traits</b>						
Extraversion	6.08	1.34	2	9	-.149	.249
Emotional stability	6.3	1.31	2	10	.047	.743
<b>Emotional reactions</b>						
Happiness	10.31	4.29	4	20	.281	-.688
Worry	7.53	3.64	4	20	1.002	.297
Anger	6.24	3.11	3	15	.795	-.209
Guilt	7.72	4.11	4	20	.954	-.032
Sadness	3.48	2.03	2	10	1.235	.464
Positive attributions	70.23	17.03	25	125	.140	.359
Liking	5.29	2.21	2	10	.339	-.719
<b>Behavioural reactions</b>						
Compliance	5.96	2.14	2	10	-.131	-.758
Move against	8.37	2.05	3	12	-.653	.005
Move away	6.88	3.08	3	15	.526	-.462

Full Sample N=744

## 6.4 Testing the correlation and mediation effects

Before testing the hypotheses, the correlation followed by mediation effects need to be examined.

### 6.4.1 Correlation analysis

Spearman's rank correlation was implemented to test the inter-correlation between the dependent variables. Violation perception was positively correlated with anger, move against and move away and negatively correlated with happiness, positive attributions, liking ( $r=-.53$ ) and compliance ( $r=-.50$ ). Happiness was positively correlated with positive attributions ( $r=.51$ ), compliance ( $r=.49$ ), move against and move away. Worry was negatively correlated with compliance and positively correlated with the move away tendency. Worry also had strong positive correlations with anger ( $r=.71$ ) and

sadness ( $r=.77$ ). Anger was negatively correlated with compliance and positively correlated with move away tendency. Anger had a strong positive correlation with sadness ( $r=.69$ ). Sadness (and not guilt) was negatively correlated with compliance and positively correlated with the move away tendency. Liking had strong positive correlation with positive attributions ( $r=.63$ ), and they are both positively correlated to compliance and negatively correlated to other behavioural reactions (Table 6.9).

#### 6.4.2 Mediation effects

The purpose of this analysis is to test whether emotional affect (happiness, worry, anger, guilt and sadness), attributions and liking mediate the relationship between violation perception and behavioural reactions. Mediation testing path analysis followed procedures outlined by Baron and Kenny (1986).

##### 6.4.2.1 Mediation effect- affective responses on compliance

Regression analysis results indicate that happiness, sadness and liking are significant predictors of compliance, but violation perception is still a strong predictor. This suggests only a partial mediation of violation perception through happiness, sadness and liking (Table 6.3).

*Table 6.3: Hierarchical regression analysis for affective responses and attributions predicting compliance in Study 2*

Variable	$\Delta R^2$	$\beta$
Step 1	.261***	
Violation perception		-.510***
Step 2	.132***	
Violation perception		-.322***
Happiness		.364***
Worry		.010
Anger		-.104*
Guilt		.038
Sadness		-.148**
Step 3	.031***	
Violation perception		-.224***
Happiness		.319***
Worry		-.023
Anger		-.069
Guilt		.046
Sadness		-.155**
Positive Attributions		.050
Liking		.188***

A Sobel test was calculated in order to test whether each of the mediators significantly carried the influence of compliance. Calculations resulted in significant findings for happiness and liking but not



sadness with a Sobel statistic, suggesting that more happiness and liking mediate violation perception's prediction of compliance (Table 6.4).

*Table 6.4: Sobel tests for the effect of potential mediators on violation perception predicting compliance in Study 2*

	Violation perception	Happiness	Sadness	Liking
$\beta$	-0.510	.319	-.155	.188
t	-16.15	9.20	-2.97	4.84
p-value	0.001	.001	.01	.001
Sobel Z		-7.84	-0.18	-4.60
p-value		0.001	0.86	0.001

#### *6.4.2.2 Mediation effect- affective responses on the move against tendency*

Regression results reveal that liking and sadness are significant predictors of the move against tendency, but violation perception is still a strong predictor suggesting only a partial mediation of violation perception through liking and sadness (Table 6.5).

Table 6.5: Hierarchical regression analysis for affective responses and attributions predicting 'move against' in Study 2

Variable	$\Delta R^2$	$\beta$
Step 1	.105***	
Violation perception		.325***
Step 2	.011	
Violation perception		.300***
Happiness		-.049
Worry		-.126
Anger		-.061
Guilt		-.018
Sadness		.142*
Step 3	.057***	
Violation perception		.171***
Happiness		.003
Worry		-.082
Anger		-.109
Guilt		-.028
Sadness		.151*
Positive Attributions		-.037
Liking		-.271***

A Sobel test was calculated in order to test whether each of the mediators significantly carried the influence of the move against tendency. Calculations resulted in a significant finding for liking only but not sadness with a Sobel statistic, suggesting that less liking mediates violation perception's prediction of the move against tendency (Table 6.6).

Table 6.6: Sobel tests for the effect of potential mediators on violation perception predicting 'move against' in Study 2

	Violation perception	Sadness	Liking
$\beta$	0.325	.151	-.271
t	9.35	2.43	-5.84
p-value	0.001	.190	.001
Sobel Z		.181	5.50
p-value		0.86	0.001

#### 6.4.2.3 Mediation effect- affective responses on the move away tendency

Regression results show that happiness, anger, sadness, liking and positive attributions are significant predictors of the move away tendency. However, violation perception is no longer significant in the final model, whilst happiness, anger, sadness, liking and positive attributions are significant. This suggests a full mediation of violation perception through happiness, anger, sadness, liking and positive attributions (Table 6.7).

Table 6.7: Hierarchical regression analysis for affective responses and attributions predicting 'move away' in Study 2

Variable	$\Delta R^2$	$\beta$
Step 1	.008*	
Violation perception		.089*
Step 2	.270***	
Violation perception		.108**
Happiness		-.129***
Worry		.076
Anger		.326***
Guilt		.018
Sadness		.132*
Step 3	.035***	
Violation perception		.062
Happiness		-.099**
Worry		.090
Anger		.294***
Guilt		.015
Sadness		.144*
Positive Attributions		-.188***
Liking		-.250***

A Sobel test was calculated in order to test whether each of the mediators significantly carried the influence of the move away tendency. Calculations resulted in significant findings for happiness, anger, liking and positive attributions but not sadness with a Sobel statistic, suggesting that less happiness, liking and positive attributions and more anger mediate violation perception's prediction of the move away tendency (Table 6.8).

Table 6.8: Sobel tests for the effect of potential mediators on violation perception predicting 'move away' in Study 2

	Violation perception	Happiness	Anger	Positive attributions	Liking	sadness
$\beta$	0.089	-.099	.294	-.188	-.250	.144
t	2.45	-2.63	6.06	-4.29	-5.90	2.53
p-value	0.02	.01	.001	.001	.001	.05
Sobel Z		2.59	3.34	4.11	5.57	.182
p-value		0.01	0.001	0.001	0.001	.85

Table 6.9: Spearman's rank correlation coefficient for entire sample (N=744)

	M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Global identity	16.93																
2 Local identity	11.46	-.550**															
3 Organisl Trust	21.58	.341**	-.250**														
4 Dispos Trust	21.63	.310**	-.196**	.396**													
5 Extraversion	6.08	.159**	-.187**	.131**	.054												
6 Emotional St	6.30	.162**	-.135**	.085**	.047	.478**											
7 Violation per	24.14	-.157**	.047	-.187**	-.270**	-.029	-.012										
8 Happiness	10.31	.154**	-.104**	.232**	.212**	.045	.012	-.463**									
9 Worry	7.53	-.105**	.188**	-.086**	.022	-.118**	-.129**	.010	.103**								
10 Anger	6.24	-.093**	.109**	-.057**	-.014	-.132**	-.117**	.214**	-.042	.708**							
11 Guilt	7.72	.063	-.028	.048	.076**	-.007	.010	-.063	.025	-.028	-.043						
12 Sadness	3.48	-.165**	.218**	-.136**	-.042	-.137**	-.117**	.088**	.073**	.772**	.686**	-.004					
13 Positive Attr	70.23	.225**	-.039	.208**	.268**	.037	.005	-.469**	.507**	.060	-.065**	.005	.037				
14 Liking	5.29	.138**	-.005	.141**	.226**	.022	.003	-.526**	.387**	.069	-.143**	.008	.011	.630**			
15 Compliance	5.96	.277**	-.192**	.300**	.242**	.107**	.085**	-.497**	.489**	-.168**	-.289**	.084**	-.228**	.419**	.450**		
16 Move Against	8.37	-.206**	.146**	-.202**	-.225**	-.074**	-.105**	.337**	-.227**	.006	.076**	-.040	.080**	-.284**	-.348**	-.368**	
17 Move Away	6.88	-.011	.076**	.043	.054	-.053	-.055	.109**	.114**	.383**	.457**	-.010	.426**	.038	-.141**	-.142**	.044

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

## Summary of the mediation findings

The results showed that more happiness and liking mediate violation perception's prediction of compliance; less liking mediates violation perception's prediction of the move against tendency; and less happiness, liking and positive attributions and more anger mediate violation perception's prediction of the move away tendency, indicating that the effect of norm violations in email communication first falls upon happiness, anger, liking and positive attributions and then behavioural reactions. An email causing strong negative emotions and attributions may develop negative behavioural reactions such as non-compliance, move against or move away from the email sender.

## 6.5 Testing the Hypotheses

In the following sections, Part 1 presents the results for the moderation and interaction effects of email sender's and receiver's culture and status on the study outcomes (Hypotheses 1-4) and Part 2 displays the results for the moderation and interaction effects of global identity, local identity, trust, and personality on the study outcomes (Hypotheses 5-22).

### 6.5.1 Part 1: Results for the effects of email sender's and receiver's culture and status on the study outcomes

The following section reports the results which tested the moderation and interaction effects of email sender/receiver culture and status on emotional and behavioural reactions to a perceived email violation in an international business sample using hierarchical multiple regression outlined by Baron and Kenny (1986).

#### 6.5.1.1 Hypothesis 1: Moderating effect of sender's culture

Participants would make more negative attributions, show a more negative affective response, and show a more negative behavioural reaction when the email sender is of the same culture, than when the email sender is of a different culture.

- *Moderating effect- culture on violation perception predicting affective responses and attributions*

The moderation effect of sender's culture on the relationships between violation perception and affective responses or attributions was not supported.

- *Moderating effect- culture on affective responses predicting behavioural reactions*

Sender's culture had no moderating effect on behavioural reactions of compliance, the move against or the move away tendency.

In summary, the moderating effect of email sender's culture on how violation perception influences affective responses and attributions and how affective responses and attributions influence the behavioural reactions was not supported. Sender's culture had no moderating effect on the affective responses, attributions and behavioural reactions, suggesting no substantial influence of sender's culture on increasing or decreasing the recipient's reactions towards the email sender. Hypothesis 1 was rejected within the international business sample. These results seem to emphasise that the sender's culture has a limited effect on the reactions to email norm violation in the international business sector.

These findings did not indicate to an in-culture/out-culture (in-group/out-group) bias or favouritism within the international business sample; thus it may be more acceptable for foreign individuals to violate communication norms than for in-culture individuals, and expectations towards same-culture senders or foreign individuals violating email communication norms may be similar. These findings suggest that social identity theory is somewhat outdated in this regard. Globalisation and the popularisation of the internet have moderated perceptions of in-groups and out-groups based on culture; precisely, reactions to cultural out-groups are not as negative as social identity theory would suggest.

#### *6.5.1.2 Hypothesis 2: Moderating effect of sender's status*

**Hypothesis 2** predicted that participants would make more negative attributions, show a more negative affective response, and show more negative behavioural reaction when the email sender has a different status than when the sender has the same status.

- *Moderating effect- status on violation perception predicting affective reactions and attributions*

The results of the hierarchical regression analysis indicate that status was a significant moderator of violation perception predicting anger (Table 6.10) ( $\beta = -.184$ ,  $p < .01$ ), ( $\Delta R^2 = .015$ ,  $F(1,738) = 7.42$ ,  $p < .01$ ), indicating that participants reacted with less anger to the email violation when the sender was perceived to be of lower status, thus the lower status of senders reduced the influence of violation perception on the emotion of anger.

Table 6.10: Hierarchical regression testing if sender's status moderates effect of violation perception on anger

Variables	$\Delta R^2$	$\beta$
Step 1	.073***	
Violation perception		.097*
Sender's status		.238***
Step 2	.015**	
Violation perception		.236**
Sender's status		.234***
Violation perception X Sender's status		-.184**

To sum up, lower status negatively moderates the relationship between violation perception and anger, indicating a lower status preference and a same status bias. Regression tests found no significant moderation effect of sender's status on how violation perception predict attributions or other affective responses (i.e. worry, sadness, guilt, happiness and liking), suggesting that these affective responses and attributions were not influenced by sender's status, whether higher, same or lower. Hypothesis 2 was not supported for affective responses and attributions.

- *Moderating effect- status on affective responses predicting compliance and the move against and the move away tendency*

Sender's status did not moderate the behavioural reaction of compliance and the move against and the move away tendencies, suggesting that the sender's status does not increase or decrease the relationship between affective responses and these three behavioural reactions. Hypothesis 2 was rejected for all behavioural reactions.

- *Participants' status- do psychometric scale scores vary by supervisor status?*

An independent samples t-test (two-tailed) compared psychometric scores between two groups, i.e. those who answered yes versus no to supervising people. There was a significant group difference in the tendency to move away, at the  $p < .01$  level. Those who supervised other people had significantly higher tendency to move away (yes:  $M=7.22$ ,  $SD=3.27$  versus no:  $M=6.54$ ,  $SD=2.85$ ),  $t(742) = 3.045$ ,  $p=.002$ . No other comparisons were significant at  $p < .01$ .

#### 6.5.1.3 Hypothesis 3: interaction effect of culture and status

Hypothesis 3 predicted that participants would make more negative attributions (H3a), show a more negative affective response (H3b), and show a more negative behavioural response (H3c), when the sender has a different status and the same culture than when the sender has the same status and different culture.

▪ *Hypothesis 3a: Interaction Effect of Culture and Status on Attributions*

The results of hierarchical regression analysis revealed no significant interaction effect of sender's status and sender's culture on positive attributions. Hypothesis 3a was not supported for positive attributions.

Table 6.11: Hierarchical regression testing the interaction effect of culture and status on worry in Study 2

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.037***			
Violation perception		-.090	-2.476	.014
Sender's culture		.094	2.594	.010
Sender's status		.117	2.704	.007
Step 2	.016**			
Violation perception		-.104	-2.868	.004
Sender's culture		.273	4.058	.000
Sender's status		.274	4.413	.000
Culture X status		-.245	-3.506	.000

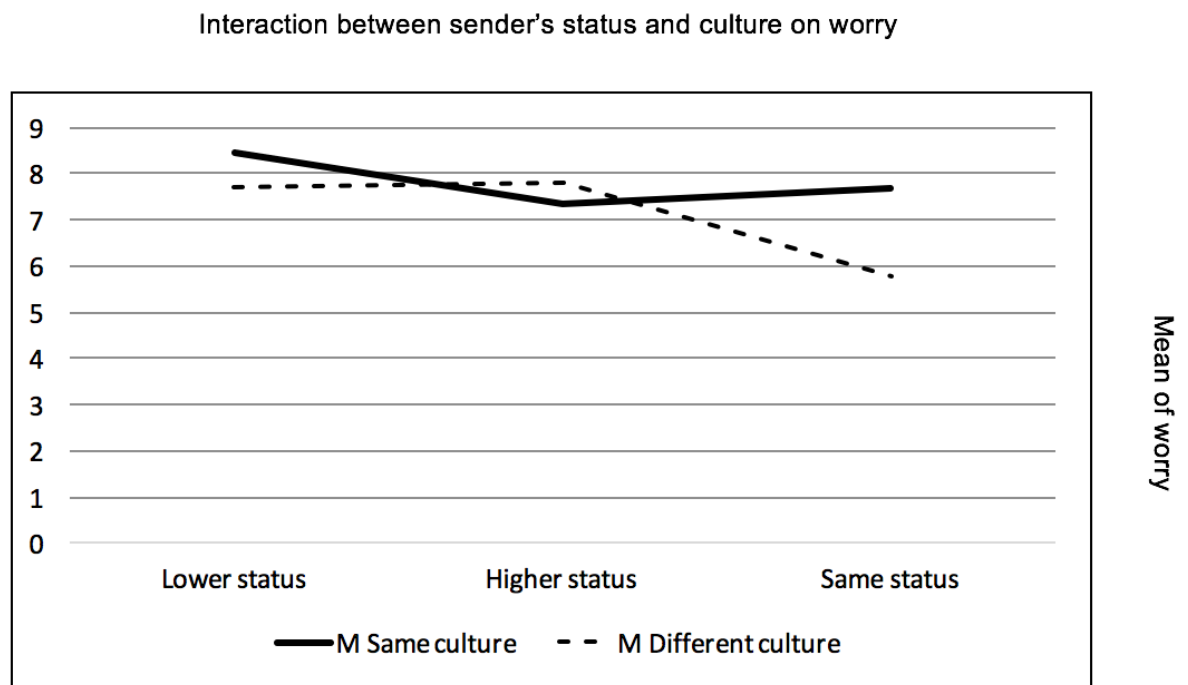


Figure 6.1: Interaction between sender's status and sender's culture on recipient's worry

▪ *Hypothesis 3b: Interaction Effect of Culture and Status on Affective Responses*

The results of hierarchical regression analysis revealed that there was a significant interaction effect of sender's status and sender's culture on worry ( $\beta=-.245$ ,  $p<.001$ ), ( $\Delta R^2=.016$ ,  $F(2,737)=6.15$ ,  $p<.01$ ); anger ( $\beta=-.196$ ,  $p<.01$ ), ( $\Delta R^2=.011$ ,  $F(2,737)=4.24$ ,  $p<.05$ ); sadness ( $\beta=-.223$ ,  $p<.01$ ), ( $\Delta R^2=.014$ ,  $F(2,737)=5.19$ ,  $p<.01$ ), demonstrating that individuals perceived less worry, anger, sadness (Figures 6.1-3). when they read the email sent by a same-status sender of a different culture than when they read the email sent by a person of the same culture and different status (i.e. same status was favoured over same culture). Hypothesis 3b was supported for worry,



anger and sadness (Tables 6.11-13). However, the hypothesis was not supported for happiness, liking and guilt.

Table 6.12: Hierarchical regression testing the interaction effect of culture and status on anger in Study 2

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.064***			
Violation perception		.120	3.360	.001
Sender's culture		.087	2.439	.015
Sender's status		.112	2.624	.009
Step 2	.011*			
Violation perception		.110	3.056	.002
Sender's culture		.214	3.212	.001
Sender's status		.237	3.870	.000
Culture X Status		-.196	-2.844	.005

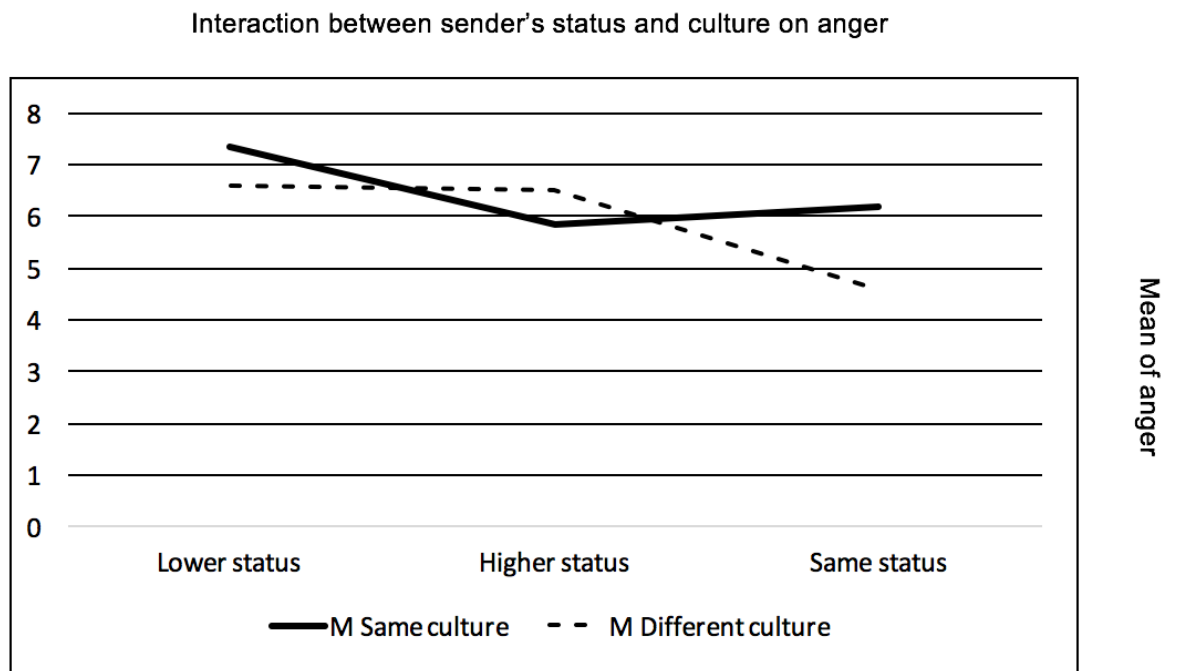


Figure 6.2: Interaction between sender's status and sender's culture on recipient's anger

Table 6.13: Hierarchical regression testing the interaction effect of culture and status on sadness in Study 2

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.019**			
Violation perception		-.011	-.301	.763
Sender's culture		.056	1.528	.127
Sender's status		.093	2.113	.035
Step 2	.014**			
Violation perception		-.025	-.672	.502
Sender's culture		.234	3.434	.001
Sender's status		.236	3.759	.000
Culture X Status		-.223	-3.168	.002

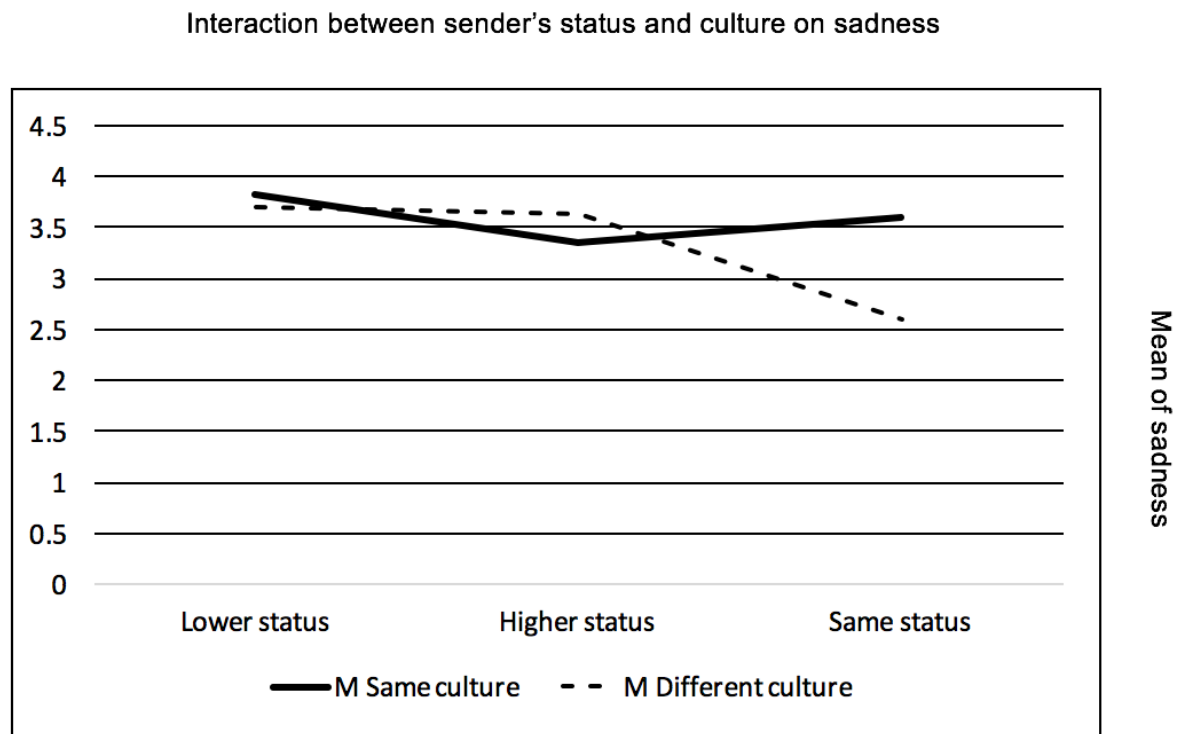


Figure 6.3: Interaction between sender's status and sender's culture on recipient's sadness

▪ *Hypothesis 3c: Interaction Effect of Culture and Status on Behavioural Reactions*

There was a significant interaction effect of sender's status and sender's culture on the move away tendency ( $\beta = -.517$ ,  $p < .001$ ), ( $\Delta R^2 = .071$ ,  $F(2,737) = 28.79$ ,  $p < .001$ ), indicating that individuals were less likely to move away from the sender when they read the email sent by a same-status sender of a different culture (Figure 6.4) than when they read the email sent by a person of the same culture and different status (Table 14). Hypothesis 3c was confirmed for the move away tendency. However, the hypothesis was not supported for compliance and the tendency of moving against the sender.

#### Interaction between sender's status and culture on the move away tendency

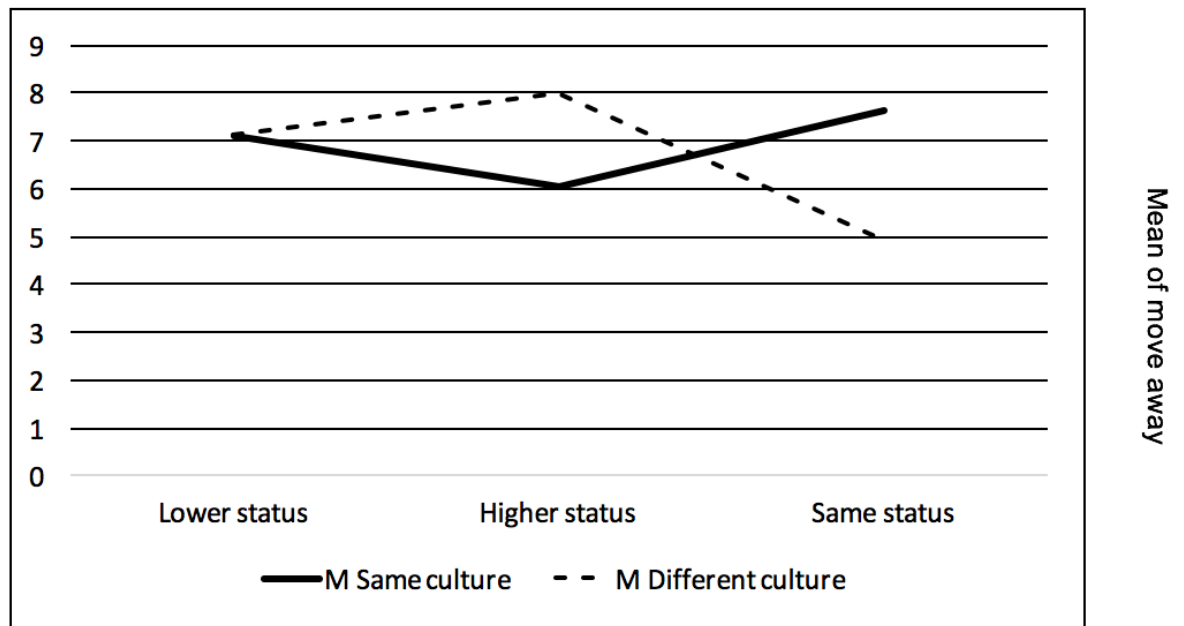


Figure 6.4: Interaction between sender's status and sender's culture on recipient's move away

Table 6.14: Hierarchical regression testing the interaction effect of culture and status on move away in Study 2

Variables	$\Delta R^2$	$\beta$	$t$	$p$
Step 1	.019**			
Violation perception		.078	2.135	.033
Sender's culture		.014	.370	.711
Sender's status		.108	2.457	.014
Step 2	.071***			
Violation perception		.048	1.339	.181
Sender's culture		.407	6.159	.000
Sender's status		.438	7.209	.000
Culture X Status		-.517	-7.560	.000

##### 6.5.1.4 Hypothesis 4: collectivism/ individualism and power-distance

Hypothesis 4 predicted that higher collectivism and higher power-distance participants would react more strongly in terms of attributions, affective responses and behavioural reactions than lower collectivism and lower power-distance participants.

Table 6.15: H4. T-test, Means and standard deviation of high/low collectivism in the business sample

Variables	Level of collectivism	N	M	SD	t	p
Happiness	High	381	10.84	4.46	3.50	.001
	Low	361	9.75	4.04		
Worry	High	381	7.96	3.86	3.42	.001
	Low	361	7.06	3.32		
Anger	High	381	6.48	3.24	2.17	.030
	Low	361	5.99	2.95		
Guilt	High	381	7.65	4.12	-0.50	.620
	Low	361	7.80	4.11		
Sadness	High	381	3.70	2.15	3.08	.002
	Low	361	3.24	1.88		
Positive attributions	High	381	72.71	17.84	4.15	.001
	Low	361	67.57	15.77		
Liking	High	381	5.48	2.31	2.35	.019
	Low	361	5.10	2.09		
Compliance	High	379	6.08	2.19	1.42	.156
	Low	361	5.85	2.09		
Move against	High	381	8.20	2.21	-2.29	.022
	Low	361	8.55	1.85		
Move away	High	381	7.14	3.11	2.44	.015
	Low	361	6.59	3.03		

To test Hypothesis 4, participants were median split into two categorical variables of high and low collectivism, and high and low power distance. T-test revealed that high collectivism participants reported significantly more affective responses (i.e. happiness, worry and sadness), more positive attributions (at the  $p < .01$ ). Therefore, Hypothesis 4 was confirmed in terms of positive attributions and affective responses (i.e. happiness, worry and sadness), indicating that high collectivism participants reacted more strongly than lower collectivism (Table 6.15).

The results also indicate that high power distance participants reported significantly (at the  $p < .01$ ) more affective responses (i.e. worry and sadness), and more behavioural reactions of move against and move away tendencies. Low power distance significantly reported more liking, positive attributions and more compliance. Hypothesis 4 was confirmed for affective responses (i.e. worry and sadness), and behavioural reactions (i.e. move against and move away). See Table 6.16.

Table 6.16: H4. T-test, Means and standard deviation of high/low power distance in the business sample

Variables	Level of power distance	N	M	SD	t	p
Happiness	High	344	9.93	3.95	-2.25	.025
	Low	398	10.64	4.54		
Worry	High	344	8.01	3.54	3.41	.001
	Low	398	7.10	3.66		
Anger	High	344	6.54	2.90	2.43	.015
	Low	398	5.98	3.26		
Guilt	High	344	7.56	4.13	-1.02	.308
	Low	398	7.87	4.09		
Sadness	High	344	3.83	2.05	4.52	.001
	Low	398	3.17	1.97		
Positive attributions	High	344	68.00	15.20	-3.30	.001
	Low	398	72.12	18.30		
Liking	High	344	4.96	1.93	-3.89	.001
	Low	398	5.58	2.39		
Compliance	High	344	5.49	2.06	-5.84	.001
	Low	396	6.39	2.12		
Move against	High	344	8.88	1.94	6.53	.001
	Low	398	7.92	2.04		
Move away	High	344	7.28	2.88	3.33	.001
	Low	398	6.53	3.21		

#### 6.5.1.5 Summary of findings for Hypotheses 1–4

- *Hypothesis 1 and 2: moderating effect of sender's culture and status*

Hypothesis 1 (moderating effect of email sender's culture) and hypothesis 2 (moderating effect of email sender's status) were not supported for attributions, affective responses or behavioural reactions, indicating no significant influence of sender's culture or status on increasing or decreasing the recipient's affective responses and attributions or behavioural reactions to email norm violation in the international business sample. An email sender's culture does not seem to be an influential moderator on the study outcome variables.

- *Hypothesis 3: interaction between status and culture*

Hypothesis 3 was confirmed for affective responses (worry, anger, sadness), and the reaction of moving away from the sender. The results showed that individuals experienced less worry, anger, sadness, and less tendency to move away from the sender when they read an email sent by a same-status sender of a different culture than when they read an email sent by a person of the same culture and different status (i.e. same status was favoured over same culture). Hypothesis 3 was not supported for positive attributions and other affective or behavioural reactions. The effect of the email sender's culture might have been enhanced if the sender was of the same status. This might have influenced the recipient's affective and behavioural reactions towards the sender regarding the same-status and different-culture favouritism.

▪ *Hypothesis 4: collectivism/individualism and power distance*

High-collectivism participants reported significantly more affective responses (i.e. happiness, worry, and sadness) and more positive attributions. High-power-distance participants reported significantly more affective responses (i.e. worry and sadness), and more behavioural reactions of move against and move away tendencies. Hypothesis 4 was partially confirmed.

Unexpected results showed that low power distance significantly reported more liking, positive attributions, and more compliance than did higher-power-distance participants. These findings opposed Hypothesis 4, which may indicate the complexity of the effect of such factors. Power distance seems to be more influential on the reaction to email norm violation than collectivism in the business sample.

There was a similarity between high collectivism and high power distance in responding more negatively than low collectivism or low power distance. However, positive attributions were highly reported by high collectivism, and by low-power-distance participants. This indicates potential differences between the effect of collectivism and power distance.

#### 6.5.2 Part 2: Results for the Moderating Effect of Global Identity, Local Identity, Trust and Personality on the Study Outcomes

This section tests the study's conceptual model (in Figure 2.4), which hypothesised that affective responses and attributions mediate the relationship between violation perception and behavioural reactions (i.e. compliance, move against, move away). The model also suggests that global identity, local identity, dispositional trust, organisational trust, extraversion and emotional stability moderate the relationship between violation perception and affective responses, and the relationship between affective responses and behavioural reactions.

*Table 6.17: Regression results for global identity, dispositional trust, organisational trust predicting the outcome variables*

		Violation perception	Happiness	Worry	Anger	Guilt	Sadness	Positive attributions	Liking	Comply	Move against	Move away
Global identity	$\beta$	-0.13	0.12	0.02	0.00	0.08	-0.01	0.18	0.10	0.19	-0.05	0.04
	$t$	-3.20	2.96	0.58	0.10	2.02	-0.35	4.46	2.52	4.66	-1.33	0.91
	$p$	.001	.003	.565	.917	.043	.728	.000	.012	.000	.183	.361
Local identity	$\beta$	-0.08	-0.01	0.17	0.05	0.05	0.14	0.08	0.09	0.01	0.00	0.09
	$t$	-2.01	-0.15	4.11	1.32	1.16	3.47	2.05	2.17	0.34	0.02	2.09
	$p$	.045	.884	.000	.188	.245	.001	.041	.030	.733	.986	.037
Dispos Trust	$\beta$	-0.19	0.11	0.05	-0.01	0.03	0.01	0.18	0.17	0.13	-0.17	0.03
	$t$	-5.19	3.04	1.37	-0.15	0.70	0.27	4.90	4.56	3.45	-4.62	0.86
	$p$	.000	.002	.171	.883	.485	.784	.000	.000	.001	.000	.391
Organis Trust	$\beta$	-0.03	0.13	-0.01	0.02	-0.01	-0.04	0.07	0.03	0.16	-0.08	0.09
	$t$	-0.85	3.55	-0.31	0.60	-0.14	-0.99	1.95	0.72	4.25	-2.03	2.34
	$p$	.397	.000	.759	.546	.892	.323	.052	.471	.000	.042	.020

Table 6.18: Regression results for extraversion, emotional stability predicting the outcome variables

		Violation perception	Happiness	Worry	Anger	Guilt	Sadness	Positive attributions	Liking	Comply	Move against	Move away
Extraversion	$\beta$	-0.03	0.06	-0.07	-0.10	0.01	-0.11	0.03	0.07	0.11	-0.02	-0.06
	$t$	-0.86	1.71	-1.79	-2.55	0.28	-2.87	0.91	1.97	2.99	-0.61	-1.70
	$p$	.390	.087	.074	.011	.778	.004	.361	.049	.003	.543	.089
Emotional Stability	$\beta$	0.01	0.00	-0.07	-0.03	-0.01	-0.05	0.00	-0.05	0.01	-0.07	0.01
	$t$	0.32	-0.05	-1.78	-0.89	-0.39	-1.23	0.01	-1.20	0.14	-1.74	0.14
	$p$	.751	.960	.076	.376	.698	.219	.994	.232	.891	.082	.888

Table 6.19: Means and standard deviations comparing high/low global identity, local identity, dispositional trust, organisational trust, extraversion, emotional stability groups on outcome variables

Outcome variables	Level of global ID, local ID, Dispositional, organisational trust, extraversion, Emotional stability	Global identity		Local identity		Dispositional trust		Organisational trust		Extraversion		Emotional Stability	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Violation perception	High	23.06	7.49	24.18	6.50	22.72	6.92	23.49	7.19	24.00	7.30	24.16	7.18
	Low	25.07	6.61	24.07	7.66	25.73	6.96	24.90	6.92	24.48	6.51	24.10	7.06
Happiness	High	11.14	4.60	9.89	4.03	10.99	4.53	11.09	4.48	10.48	4.39	10.40	4.38
	Low	9.59	3.86	10.75	4.51	9.56	3.88	9.40	3.87	9.85	3.98	10.28	4.25
Worry	High	7.36	3.86	8.11	3.49	7.64	3.90	7.43	3.92	7.36	3.61	7.13	3.43
	Low	7.69	3.43	6.97	3.71	7.40	3.31	7.63	3.27	8.05	3.70	7.76	3.74
Anger	High	6.19	3.37	6.39	2.86	6.22	3.26	6.27	3.27	6.05	3.16	6.00	3.11
	Low	6.28	2.87	6.09	3.34	6.26	2.95	6.19	2.92	6.79	2.90	6.37	3.11
Guilt	High	8.00	4.23	7.74	4.11	7.85	4.13	7.77	4.14	7.73	4.15	7.64	4.00
	Low	7.46	3.99	7.68	4.12	7.57	4.10	7.66	4.09	7.66	4.00	7.75	4.17
Sadness	High	3.30	2.07	3.80	2.04	3.44	2.13	3.35	2.07	3.33	1.98	3.28	1.87
	Low	3.64	1.99	3.16	1.98	3.51	1.92	3.63	1.98	3.89	2.14	3.58	2.11
Positive attributions	High	73.76	19.12	69.69	14.41	73.83	17.42	72.56	17.85	70.57	17.86	70.42	17.93
	Low	67.08	14.24	70.75	19.27	66.30	15.64	67.58	15.57	69.22	14.38	70.12	16.54
Liking	High	5.54	2.37	5.33	2.08	5.68	2.35	5.45	2.28	5.37	2.25	5.21	2.37
	Low	5.07	2.02	5.25	2.33	4.86	1.95	5.11	2.10	5.05	2.05	5.33	2.12
Compliance	High	6.53	2.20	5.71	1.95	6.35	2.09	6.43	2.10	6.11	2.18	6.06	2.23
	Low	5.47	1.95	6.22	2.29	5.53	2.12	5.42	2.06	5.56	1.97	5.92	2.09
Move Against	High	8.13	1.97	8.49	2.15	7.98	2.17	8.11	1.95	8.32	2.03	8.17	1.96
	Low	8.57	2.10	8.24	1.95	8.81	1.82	8.67	2.13	8.50	2.11	8.47	2.09
Move Away	High	6.98	3.32	7.02	2.96	7.03	3.25	7.14	3.22	6.77	3.08	6.84	3.23
	Low	6.79	2.85	6.74	3.19	6.70	2.88	6.57	2.89	7.21	3.06	6.90	3.00

▪ *Moderating Effect of Global/Local Identity, Dispositional/ Organisational Trust and Extraversion/ Emotional Stability (Hypotheses 5-10)*

This section examines the moderating role of global identity, local identity, dispositional trust, organisational trust, extraversion and emotional stability personality traits on the email recipients' emotional and behavioural reactions (Hypotheses 5-10).

6.5.2.1 Hypothesis 5- global identity

H5: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response towards the email sender when the email recipient has a higher global identity than the email recipient who has a lower global identity.

The correlation results (Table 6.9) indicate that global identity is negatively correlated with local identity ( $r(742) = -.56, p < .01$ ), positively correlated with organisational trust ( $r(738) = .36, p < .01$ ) and dispositional trust ( $r(738) = .30, p < .01$ ). Since there was a significant correlation between global identity, local identity, organisational trust and dispositional trust, a series of linear regressions (Table 6.17) was conducted to test the correlations between these four variables and affective and behavioural reactions and also to disentangle which of these variables is more

important. Regression analyses also revealed differences in the outcome variables between high and low levels of global identity, local identity, dispositional trust and organisational trust. Table 6.19 shows means and standard deviations comparing high/low global identity, local identity, dispositional trust and organisational trust groups on outcome variables.

These results indicate that individuals with higher global identity experienced more happiness, made more positive attribution and tended to comply with the email sender's request to a greater extent than their lower-global identity counterparts. The findings indicate limited significant differences between high and low global identity levels. Apart from happiness, positive attributions and compliance, high and low global identity individuals had similar affective and behavioural reactions towards the email message.

To test whether the differences found reflect a possible effect of global identity. A series of hierarchical regressions was conducted to test the moderating effect of global identity on the affective and behavioural reactions.

- *Moderating effects- global identity on the relationships between violation perception and affective responses*

**Happiness:** In the second step of the regression analysis, the interaction term between violation perception and global identity was entered, and it explained a significant increase in variance in happiness responses,  $\Delta R^2=.01$ ,  $F(1,738)=9.54$ ,  $p<.01$ ;  $\beta=-.10$ ,  $p<.01$ . Thus, global identity was a significant moderator of the relationship between violation perception and happiness (see Table 6.20). The simple slope in Figure 6.5 indicates that high global identity increases happiness when violation perception is low, whereas low global identity reduces happiness when violation perception is low. Global identity has no effect on happiness when violation perception is high.

**Liking:** Global identity was a significant moderator ( $\beta= -.08$ ,  $p<.01$ ), ( $\Delta R^2=.01$ ,  $F(1,738)=7.23$ ,  $p<.01$ ) (see Table 6.20). Figure 6.6 shows that a strong global identity increases liking, but only when violation perception is low.



Table 6.20: Hierarchical regression results testing the moderating role of global identity on the relationship between violation perception and happiness, liking, positive attributions

		Happiness		Liking		Positive attributions	
Model		$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
1	Step 1	.224**		.290**		.276**	
	Violation		-.456**		-.523**		-.483**
2	Global identity		.073*		.069*		.142**
	Step 2	.010**		.007**		.017**	
	Violation		-.440**		-.510**		-.463**
	Global identity		.085*		.078*		.157**
	(Violation perception x Global Identity)		-.101**		-.084**		-.132**

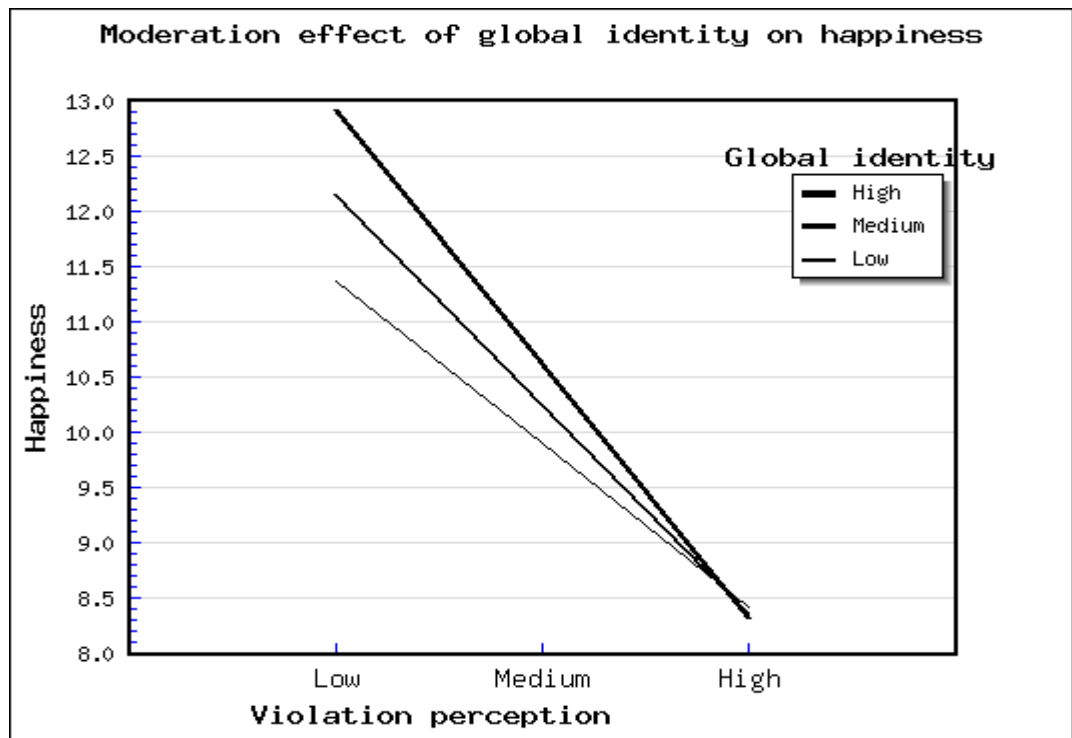


Figure 6.5: How global identity moderates the effect of violation perception on the affective reaction of happiness

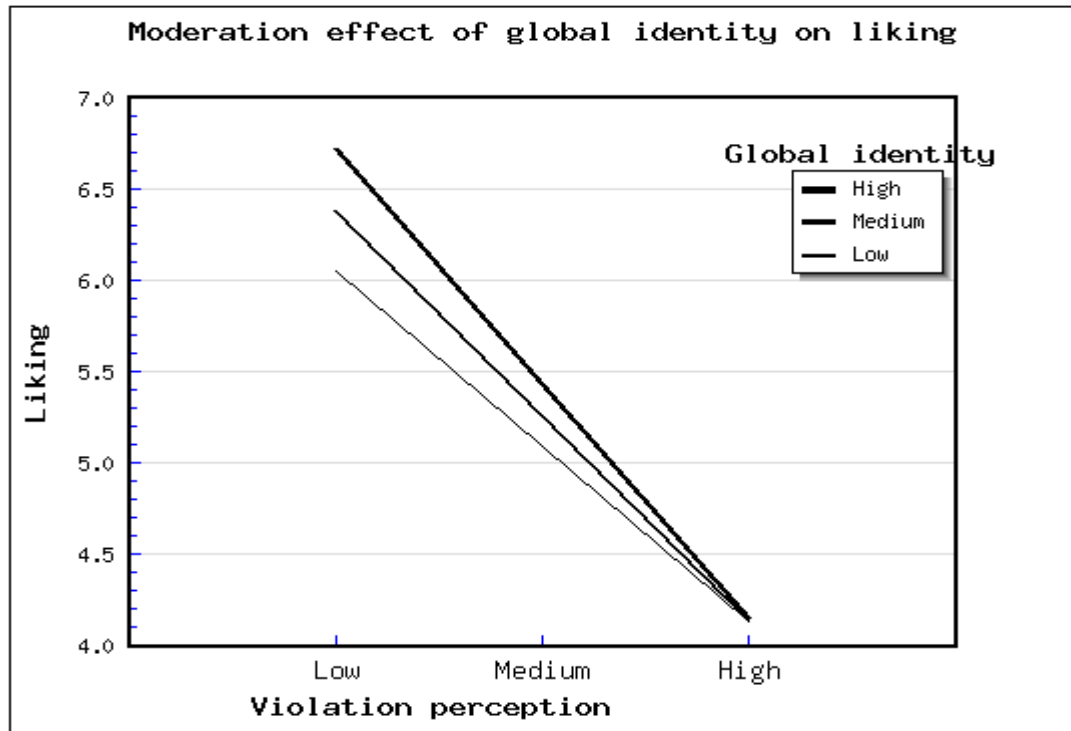


Figure 6.6: Simple slope graph indicating how global identity moderates the effect of violation perception on liking

- *Moderating effects- global identity on the relationships between violation perception and attributions*

Global identity significantly moderated the effect of violation perception on positive attributions ( $\beta = -.132$ ,  $p < .001$ ), ( $\Delta R^2 = .017$ ,  $F(1, 413) = 17.68$ ,  $p < .001$ ) (see Table 6.20). The simple slope in Figure 6.7 indicates that when violation perception is low, a high global identity increases the recipients' positive attributions of the email sender.

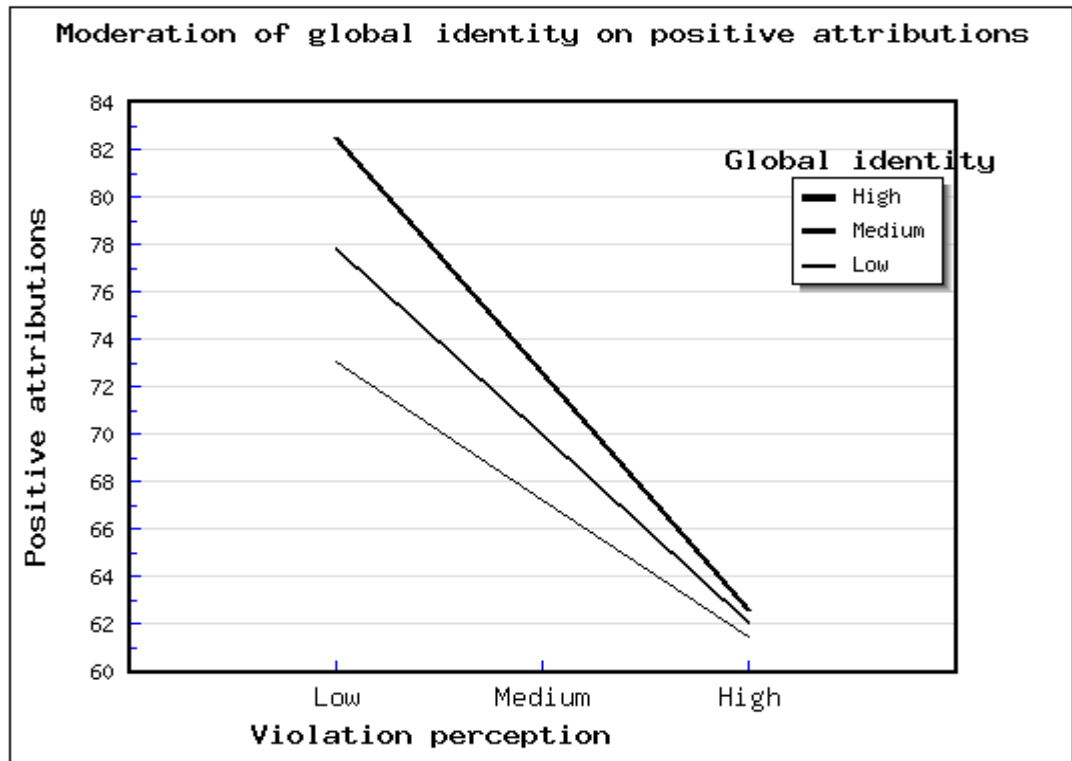


Figure 6.7: Simple slope graph indicating how global identity moderates the effect of violation perception on positive attributions

- *Moderating effects- global identity on the relationships between affective responses and the behavioural reactions of compliance and the move against tendency*

Global identity did not moderate the effect of affective responses on either compliance or the move against tendency.

- *Moderating effects- global identity on the relationships between affective responses and move away reaction*

Global identity moderated the effect of anger on the move away tendency (Table 6.21) ( $\beta=.123$ ,  $p<.001$ ), ( $\Delta R^2=.015$ ,  $F(1,737)=14.73$ ,  $p<.001$ ). The simple slope in Figure 6.8 shows that high global identity increases the tendency to move away when participants have high anger.

Table 6.21: Hierarchical regression results testing the moderating role of global identity on the relationship between anger and the move away reaction

Model		$\Delta R^2$	$\beta$
1	Step 1	.008*	
	Violation controlled		.091*
2	Step 2	.236**	
	Violation		.026
	Global identity		.046
	Anger		.491**
3	Step 3	.015**	
	Violation		.027
	Global identity		.039
	Anger		.472**
	(Anger x Global Identity)		.123**

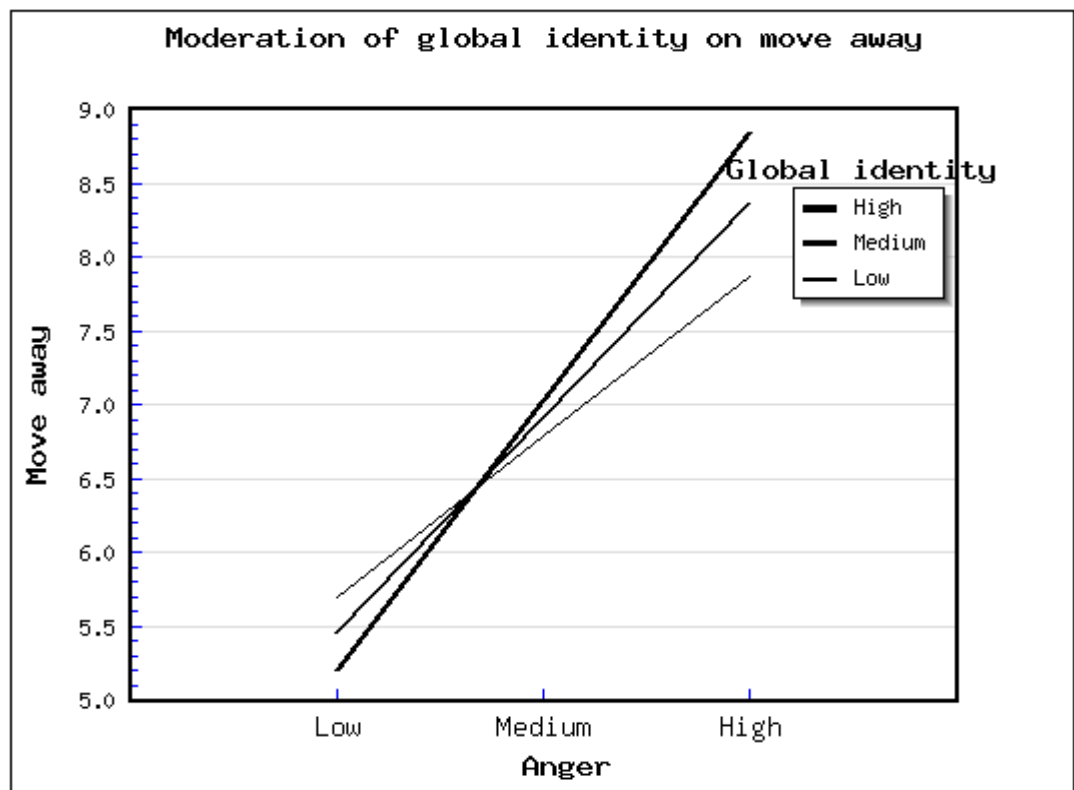


Figure 6.8: Simple slope graph indicating how global identity moderates the effect of anger on the 'moving away'

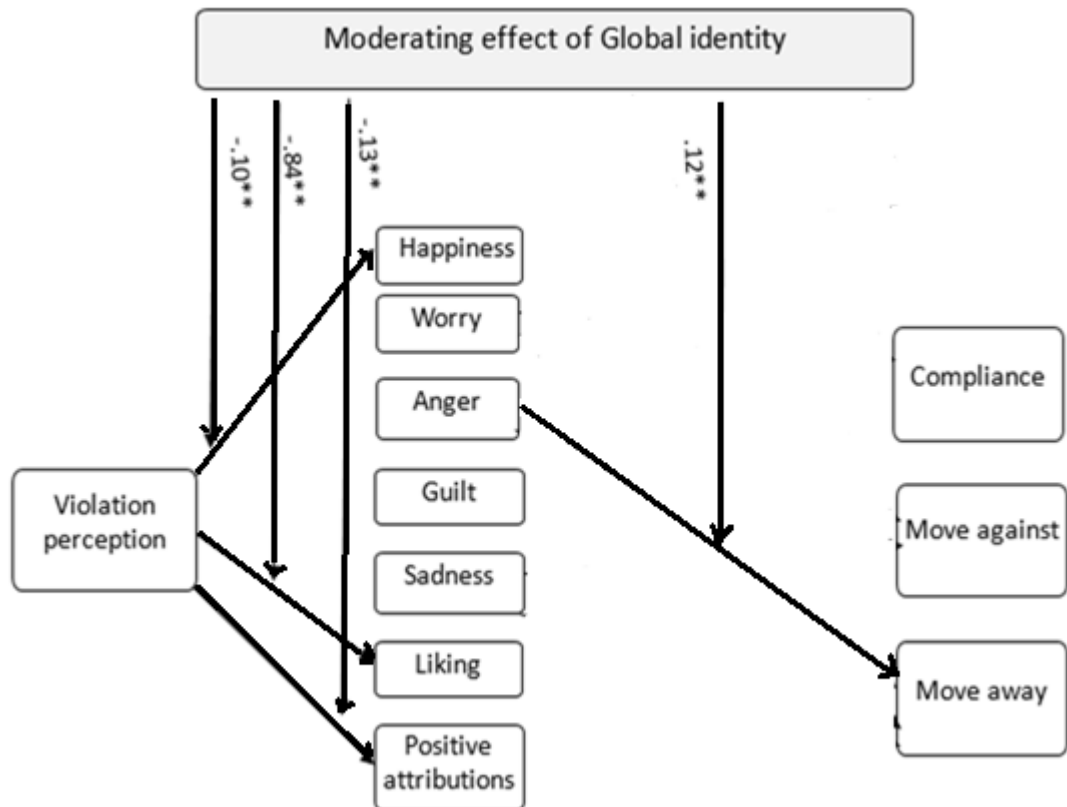


Figure 6.9: Moderating effect of global identity on the outcomes

In conclusion, the findings identified that there were differences between high and low global identity in happiness, positive attributions and compliance, but not in the other affective or behavioural reactions. Individuals with a higher global identity experienced more happiness, made more positive attributions and tended to comply more with the email sender's request than did lower-global identity individuals. Further analysis indicated that global identity moderated the relationship between violation perception (Figure 6.9) and only three outcome variables (happiness, liking and positive attributions). It was also found to moderate the effect of anger on the move away tendency, thus partially supporting Hypothesis 5. High global identity increased the tendency to move away from the sender. Although these results were limited, they demonstrated that the recipient's global identity was a significant factor which may positively influence the reaction to email norm violation.

#### 6.5.2.2 Hypothesis 6- local identity

H6: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has a lower local identity than the email recipient who has a higher local identity.

Regression analysis (Table 6.17) shows that that individuals with higher local identity experienced more worry and more sadness than lower-local identity individuals. Differences between high and low local identity participants in other affective, behavioural reactions and attributions were not significant, at the level of  $p < .01$ . This indicates that individuals with high or low local identity reacted to the email message in a similar way, apart from worry and sadness, indicating the limitation of the local identity effect on the reaction to email norm violation.

To test whether the differences found reflect a potential effect of local identity, a series of hierarchical regressions was conducted to test the moderating effect of local identity on the affective and behavioural reactions. The regression results revealed that local identity did not moderate the relationship between violation perception and affective responses. However, there was a significant moderation effect of local identity on attributions and behavioural reactions.

*Moderating effects- local identity on the relationships between violation perception and attributions*

Local identity moderated the relationship between violation perception and positive attributions (Table 6.22) ( $\beta = .113$ ,  $p < .001$ ), ( $\Delta R^2 = .012$ ,  $F(1,413) = 12.37$ ,  $p < .001$ ). The simple slope in Figure 6.10 indicates that local identity has the greatest impact on positive attributions when violation perception is low; in particular, a low local identity increases positive attributions when there is low perception of violation.

Table 6.22: Hierarchical regression results testing the moderating role of local identity on the relationship between violation perception and positive attributions

Model		$\Delta R^2$	$\beta$
1	Step 1	.259**	
	Violation		-.503**
	Local identity		-.047
2	Step 2	.012**	
	Violation		-.485**
	Local identity		-.066*
	(Violation x Local Identity)		.113**

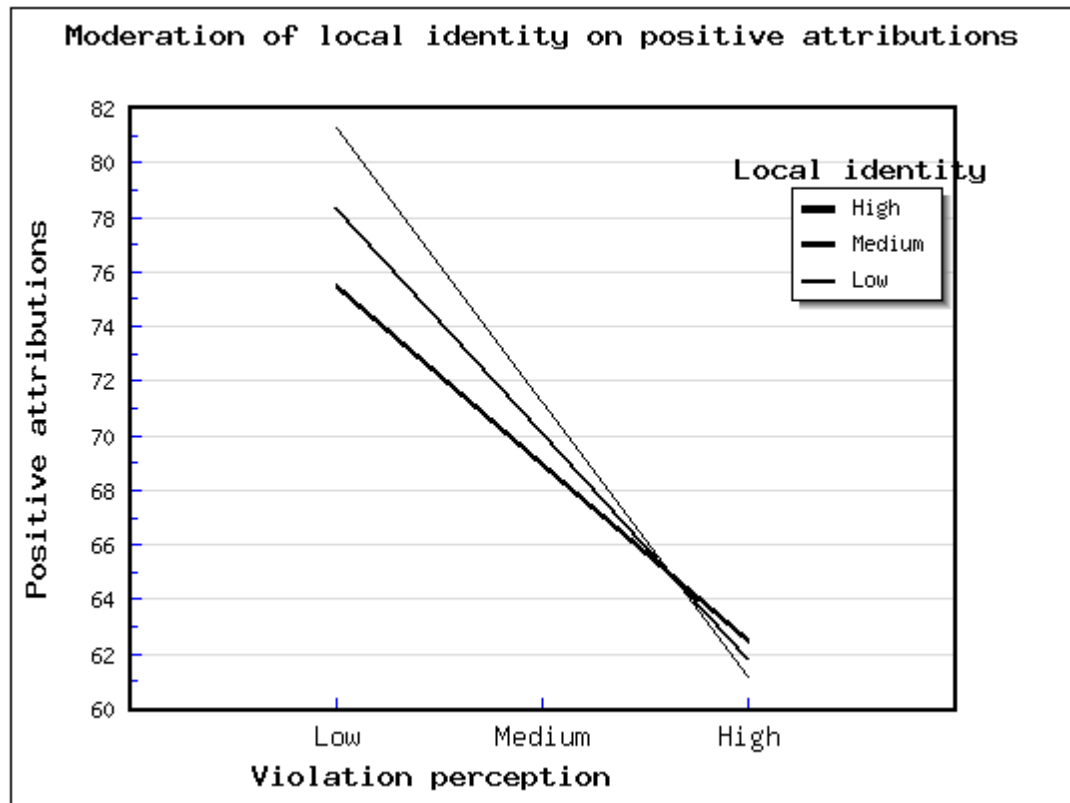


Figure 6.10: Simple slope graph indicating how local identity moderates the effect of violation perception on positive attributions

- Moderation effect- local identity on the relationships between affective responses and compliance reaction

Local identity moderated the effect of happiness on compliance, after controlling for violation perception (Table 6.23) ( $\beta = -.108$ ,  $p < .001$ ), ( $\Delta R^2 = .011$ ,  $F(1,735) = 13.18$ ,  $p < .001$ ). The simple slope in Figure 6.11 indicates that high local identity reduces compliance when participants have high happiness.

Table 6.23: Hierarchical regression results testing the moderating role of local identity on the relationship between happiness response and compliance reaction

Model		$\Delta R^2$	$\beta$
1	Step 1	.260**	
	Violation controlled		-.510**
2	Step 2	.095**	
	Violation		-.357**
	Local identity		-.116**
	Happiness		.310**
3	Step 3	.011**	
	Violation		-.348**
	Local identity		-.129**
	Happiness		.299**
	(Happiness x Local Identity)		-.108**

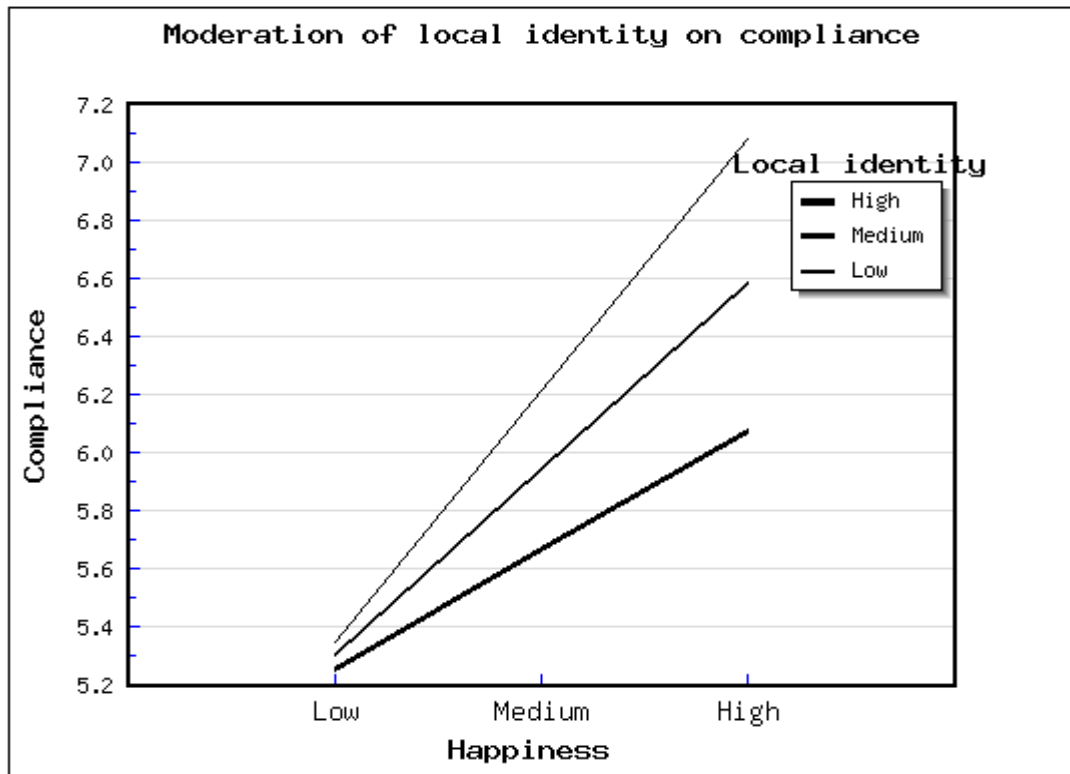


Figure 6.11: Simple slope graph indicating how local identity moderates the effect of happiness on compliance

- *Moderating effects- local identity on the relationships between affective responses and the behavioural reactions of the move against and the move away tendencies*

Local identity did not moderate the effect of affective responses on either the move against or the move way tendency.

In conclusion, individuals with higher local identity experienced more worry and sadness than did lower-local identity individuals, but there were no other significant differences. Further analysis showed that local identity moderated the relationship between violation perception and positive attributions, and the relationship between happiness and the reaction of compliance. High local identity decreases positive attributions when there is high perception of violation. High local identity also reduces compliance when participants have high happiness, suggesting that local identity may have a negative influence on positive attributions and compliance. Hypothesis 6 therefore had only several significant supporting results (Figure 6.12), indicating that the recipient's local identity had only a limited effect on the reactions to email violation compared with the effect of their global identity. Future research should therefore consider global identity as a highly influential factor in virtual team online communication. Furthermore, the differences between the effects of global and local identities demonstrated that rather than global and local identities being opposing entities, an



individual can, in fact, have both (Arnett, 2002; Erez et al., 2013), as previously discussed in this thesis (Chapter 2).

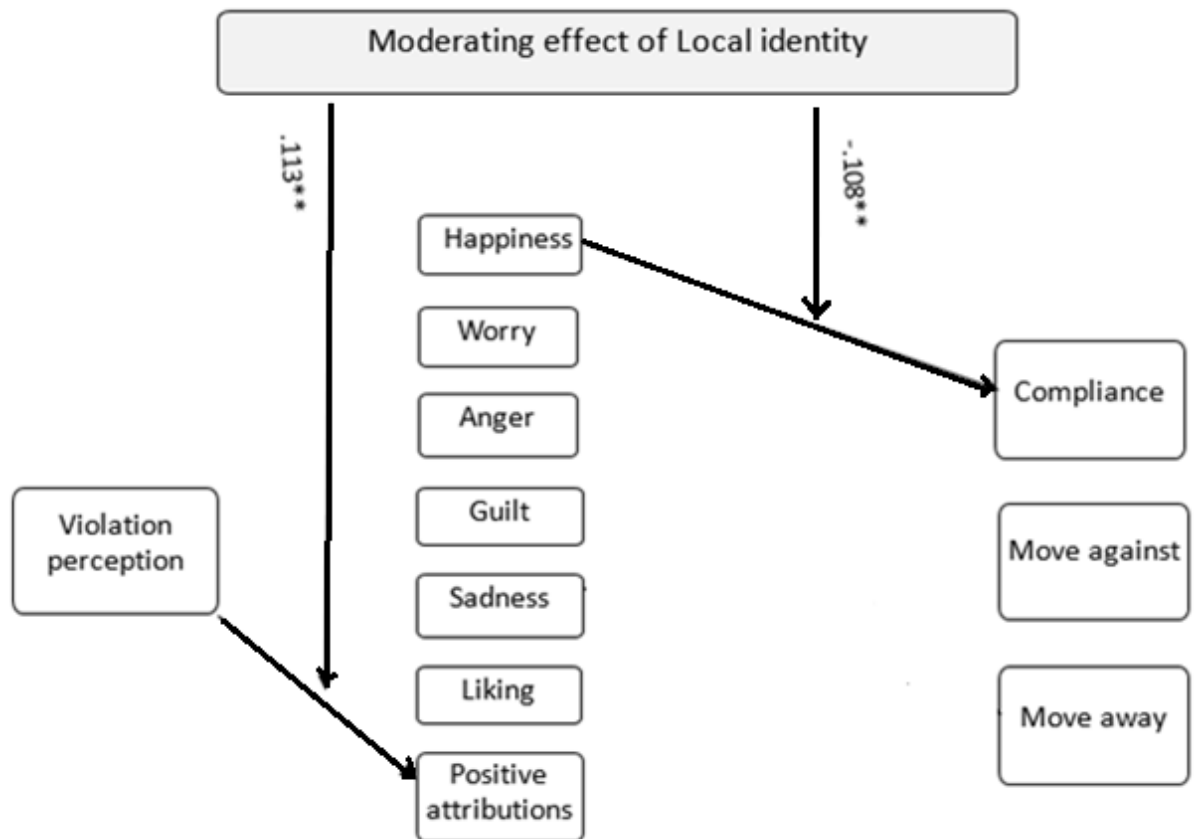


Figure 6.12: Moderating effect of local identity on the outcomes

#### 6.5.2.3 Hypothesis 7- dispositional trust

H7: Participants would make more positive attributions, show less negative affective response, and less negative behavioural response when the email recipient has higher dispositional trust (DT).

The correlation results (Table 6.9) indicate that DT is positively correlated with organisational trust, global and local identities. Therefore, a series of regression analyses including all these variables was conducted (Table 6.17), showing that higher dispositional-trust individuals significantly experienced more happiness, liking, positive attributions and more compliance, while they tended less to move against the email sender ( $p < .01$ ) than individuals with low DT. Higher DT individuals reacted to the email message more positively than lower DT individuals.

To test whether the differences found reflect a potential effect of DT. A series of hierarchical regressions was conducted to test the moderating effect of DT on the affective and behavioural reactions.

- *Moderating effects- dispositional trust on the relationships between violation perception and affective responses*

The results revealed that DT moderates the effect of violation perception on anger (Table 6.24) ( $\beta = -.156$ ,  $p < .001$ ), ( $\Delta R^2 = .024$ ,  $F(1,735) = 18.84$ ,  $p < .001$ ). The simple slope (Figure 6.13) indicates that when violation perception is low, high DT reduces the tendency to feel anger; whereas when violation perception is high, high DT reduces the tendency to feel anger. DT moderates the effect of violation perception on sadness response (Table 6.24) ( $\beta = -.121$ ,  $p < .01$ ), ( $\Delta R^2 = .015$ ,  $F(1,735) = 10.86$ ,  $p < .01$ ). The simple slope (Figure 6.14) indicates that high and low DT have opposite effects. High DT increases sadness when participants have low violation perception, and decreases sadness when participants have high violation perception. Low DT reduces sadness when there is low violation perception, and increases sadness where there is high violation perception. DT also moderates the effect of violation perception on liking (Table 6.24) ( $\beta = -.097$ ,  $p < .01$ ), ( $\Delta R^2 = .009$ ,  $F(1,735) = 9.81$ ,  $p < .01$ ). The simple slope (Figure 6.15) indicates that when violation perception is low, high DT increases the tendency to like the email sender. In contrast, this positive moderating effect is very weak when violation perception is high.

- *Moderating effects- dispositional trust on the relationships between violation perception and attributions*

The results revealed that DT moderates the effect of violation perception on positive attributions (see Table 6.24) ( $\beta = -.132$ ,  $p < .001$ ), ( $\Delta R^2 = .017$ ,  $F(1,735) = 18.34$ ,  $p < .001$ ). The simple slope (Figure 6.16) indicates that high DT increases positive attributions, particularly when violation perception is low.

*Table 6.24: Hierarchical regression results testing the moderating role of dispositional trust on the relationship between violation perception and anger, sadness, liking, positive attributions*

Model		Anger		Sadness		Liking		Positive attributions	
		$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
1	Step 1	.026**		.001		.290**		.285**	
	Violation		.167**		.017		-.499**		-.447**
	Dispositional trust		.072		.028		.103**		.188**
2	Step 2	.024**		.015**		.009**		.017**	
	Violation		.177**		.024		-.493**		-.440**
	Dispositional trust		.082*		.037		.109**		.197**
	Violation x Dispositional Trust		-.156**		-.121**		-.097**		-.132**

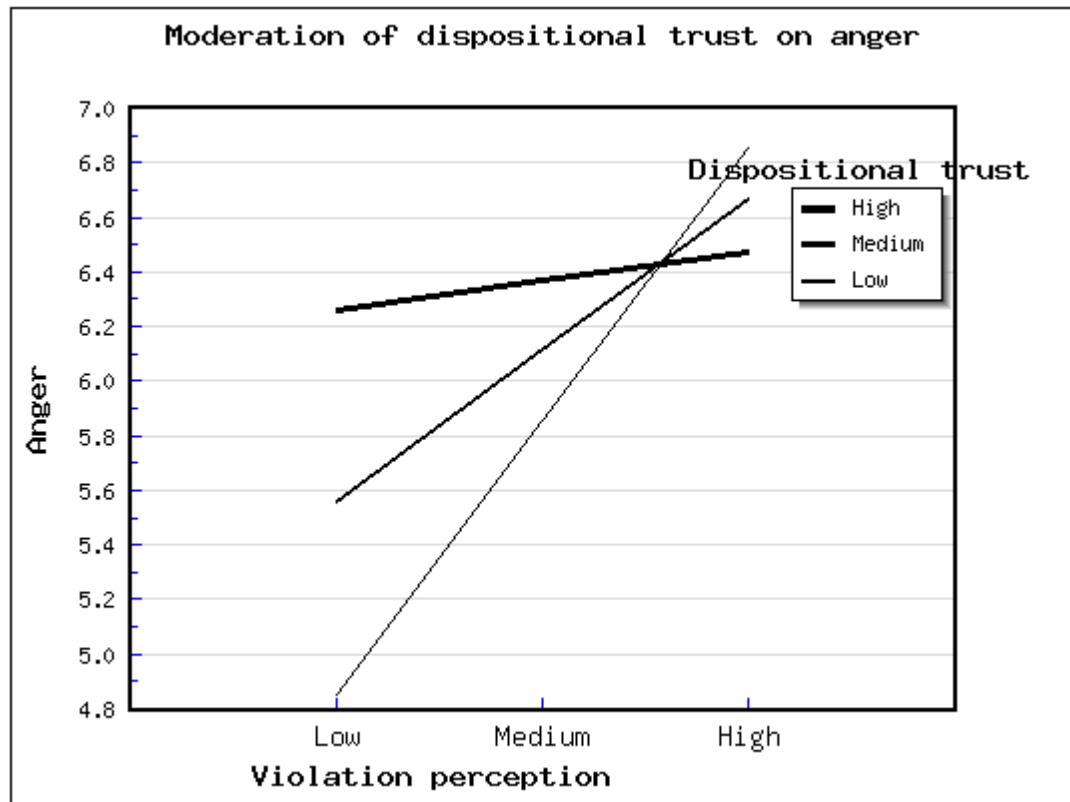


Figure 6.13: Simple slope graph indicating how dispositional trust moderates the effect of violation perception on anger

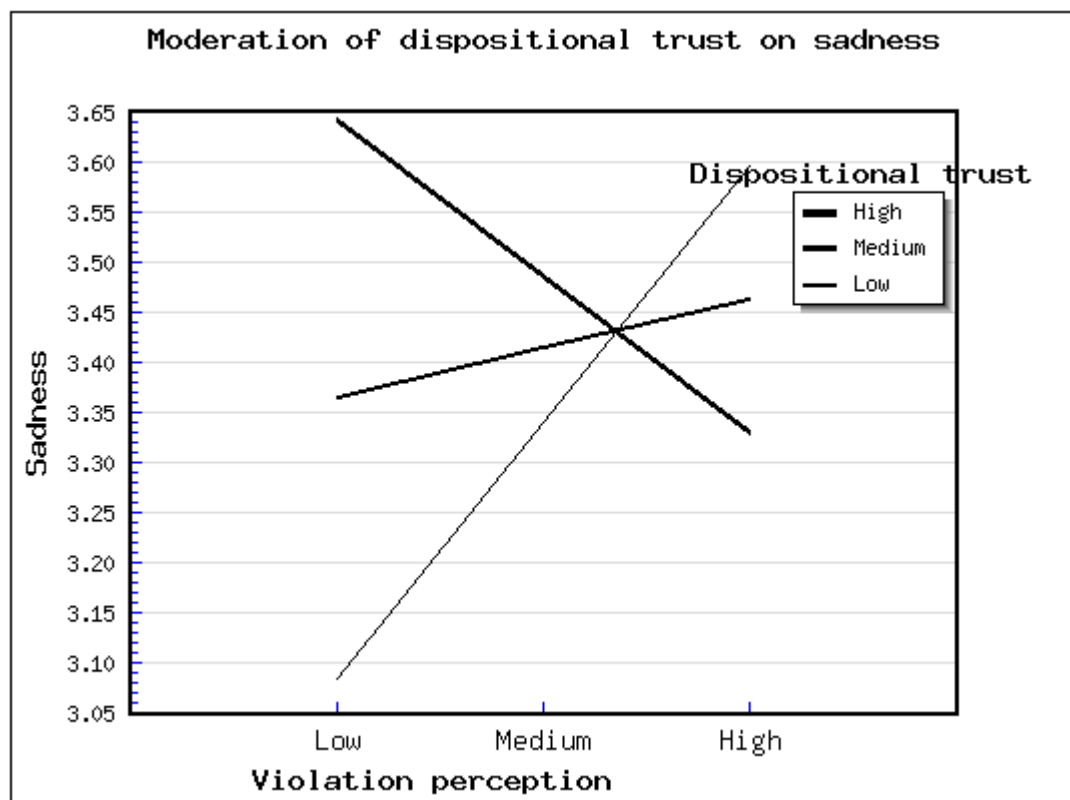


Figure 6.14: Simple slope graph indicating how dispositional trust moderates the effect of violation perception on sadness

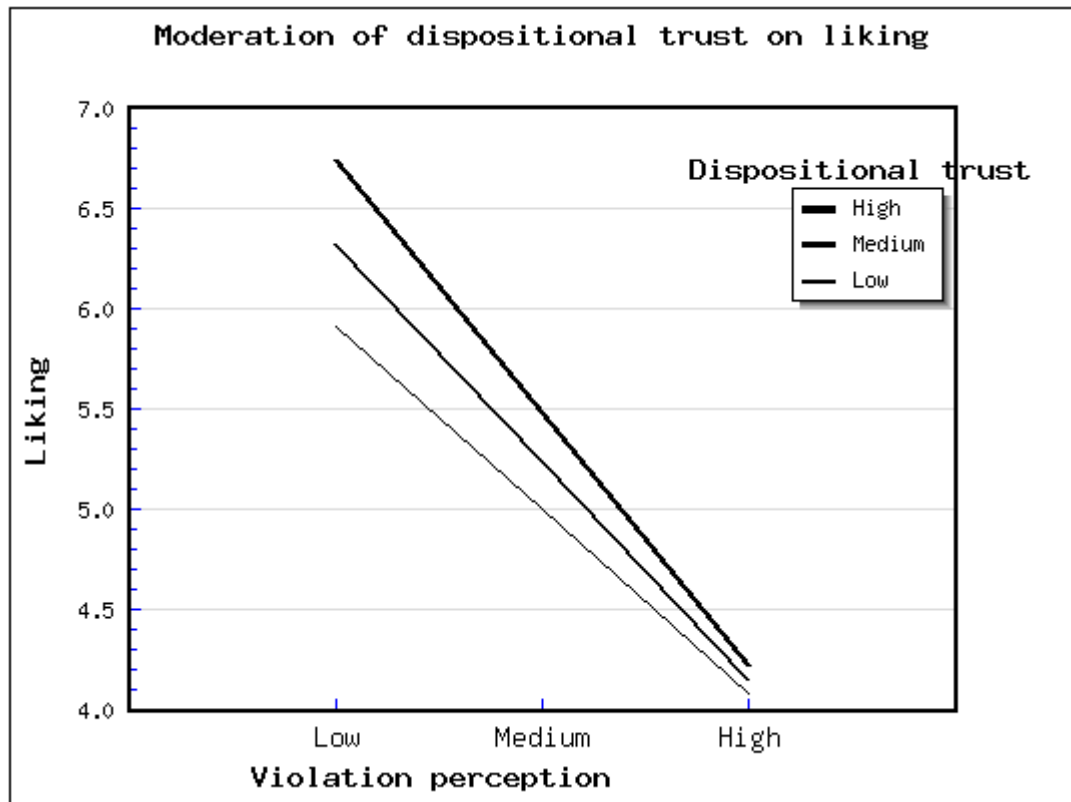


Figure 6.15: Simple slope graph indicating how dispositional trust moderates the effect of violation perception on liking

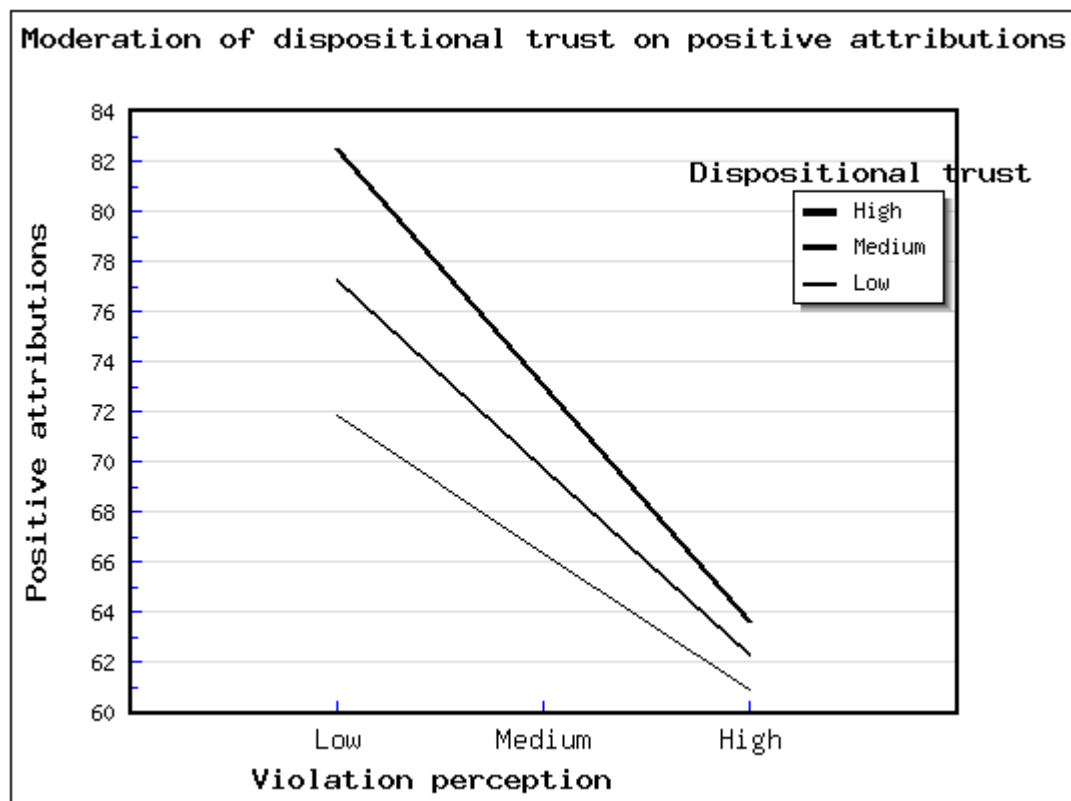


Figure 6.16: Simple slope graph indicating how dispositional trust moderates the effect of violation perception on positive attributions

- *Moderating effects- dispositional trust on the relationships between affective responses and compliance*

The results did not reveal any significant moderating effect of DT on the relationships between affective responses and compliance.

- *Moderating effects- dispositional trust on the relationships between affective responses and the move against reaction*

The results revealed that DT significantly moderates the effect of liking on move against behavioural reaction (Table 6.25) was significant ( $\beta = -.111$ ,  $p < .01$ ), ( $\Delta R^2 = .012$ ,  $F(1,734) = 10.73$ ,  $p < .01$ ). The simple slope in Figure 6.17 indicates that high DT reduces the tendency to move against when recipients like the email sender.

Table 6.25: Hierarchical regression results testing the moderating role of dispositional trust on relationship between liking and move against

Model		$\Delta R^2$	$\beta$
1	Step 1	.104**	
	Violation		.323**
2	Step 2	.070**	
	Violation		.147**
	Dispositional trust		-.122**
	Liking		-.265**
3	Step 3	.012**	
	Violation		.145**
	Dispositional trust		-.124**
	Liking		-.243**
	(Liking x Dispositional Trust)		-.111**

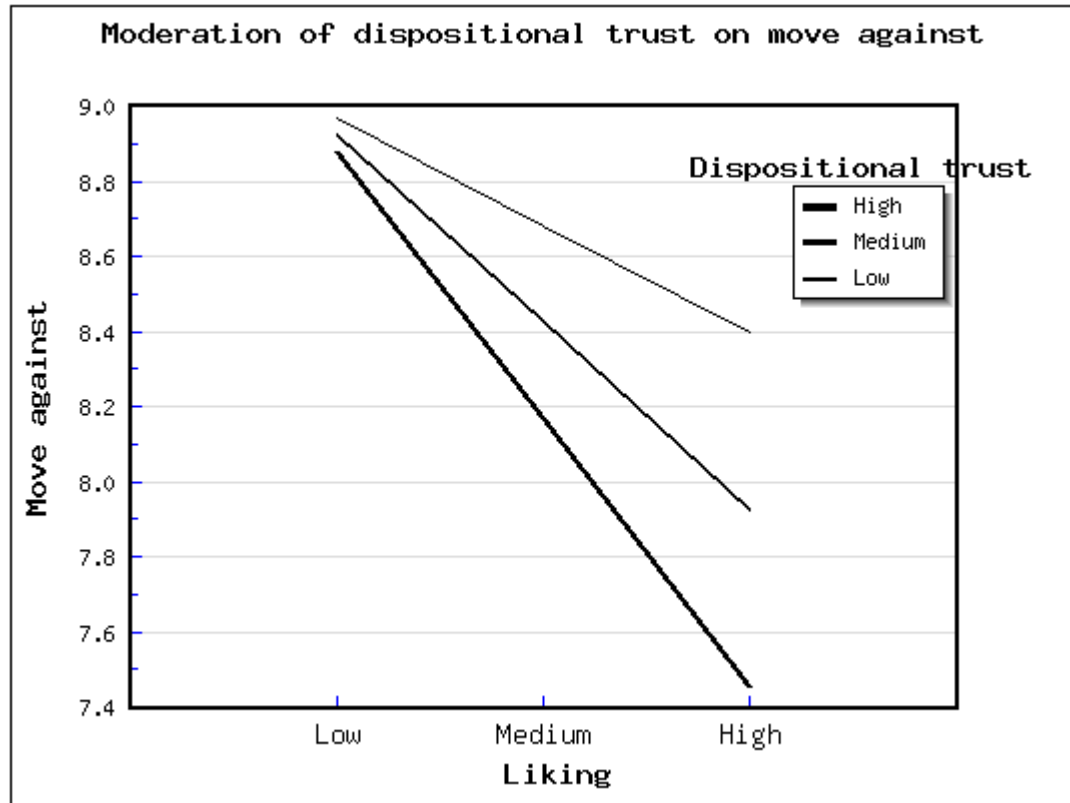


Figure 6.17: Simple slope graph indicating how dispositional trust moderates the effect of liking on the tendency to move against

- Moderating effects- dispositional trust on the relationships between affective responses and the move away reaction

The results revealed that DT moderates the effect of liking on the move away reaction (Table 6.26) ( $\beta=.126, p<.01$ ), ( $\Delta R^2=.015, F(1,734)=11.67, p<.01$ ). The simple slope in Figure 6.18 indicates that high DT increases the tendency to move away from the email sender, when the recipient likes the email sender.

Table 6.26: Hierarchical regression results testing the moderating role of dispositional trust on the relationship between liking and the move away reaction

Model		$\Delta R^2$	$\beta$
1	Step 1	.009*	
	Violation		.093*
2	Step 2	.025**	
	Violation		.056
	Dispositional trust		.127**
	Liking		-.139**
3	Step 3	.015**	
	Violation		.059
	Dispositional trust		.130**
	Liking		-.164**
	(Liking x Dispositional Trust)		.126**

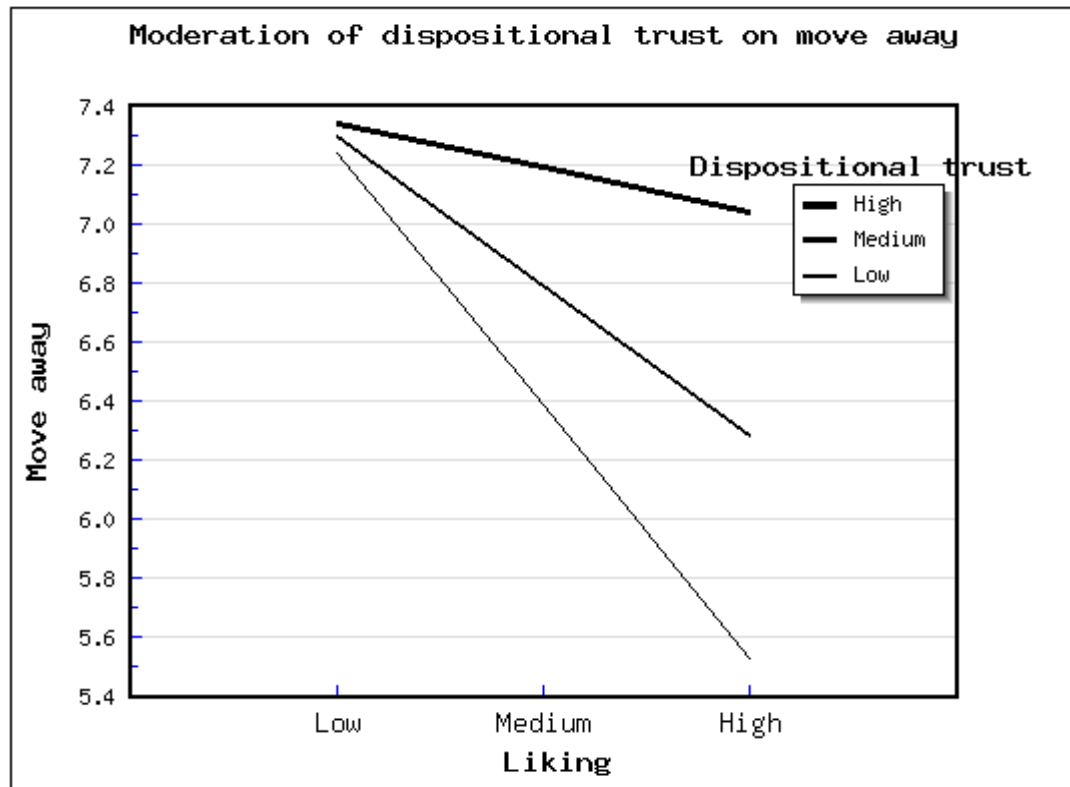


Figure 6.18: Simple slope graph indicating how dispositional trust moderates the effect of liking on the tendency to move away

In conclusion, higher DT individuals experienced significantly more happiness, liking, positive attributions and compliance, tended to move less against the email sender than those with low DT. In addition, the moderation analysis showed that DT influenced anger, sadness, liking, positive attributions and also behavioural reactions (Figure 6.19). High DT reduces the tendency to anger, and sadness and increases the tendency to like and make positive attributions towards the sender. Moreover, high DT reduces the tendency to move against the sender; however, high DT may also increase the tendency to ignore the email sender. Thus, DT affected most but not all of the outcome variables (increasing positive and reducing negative reactions), therefore Hypothesis 7 was only partially supported. The findings also emphasised the importance of the recipients' level of DT as a factor which could affect their reactions to email norm violation, with recipients with high DT possibly reacting more positively towards the email sender than those with low DT.

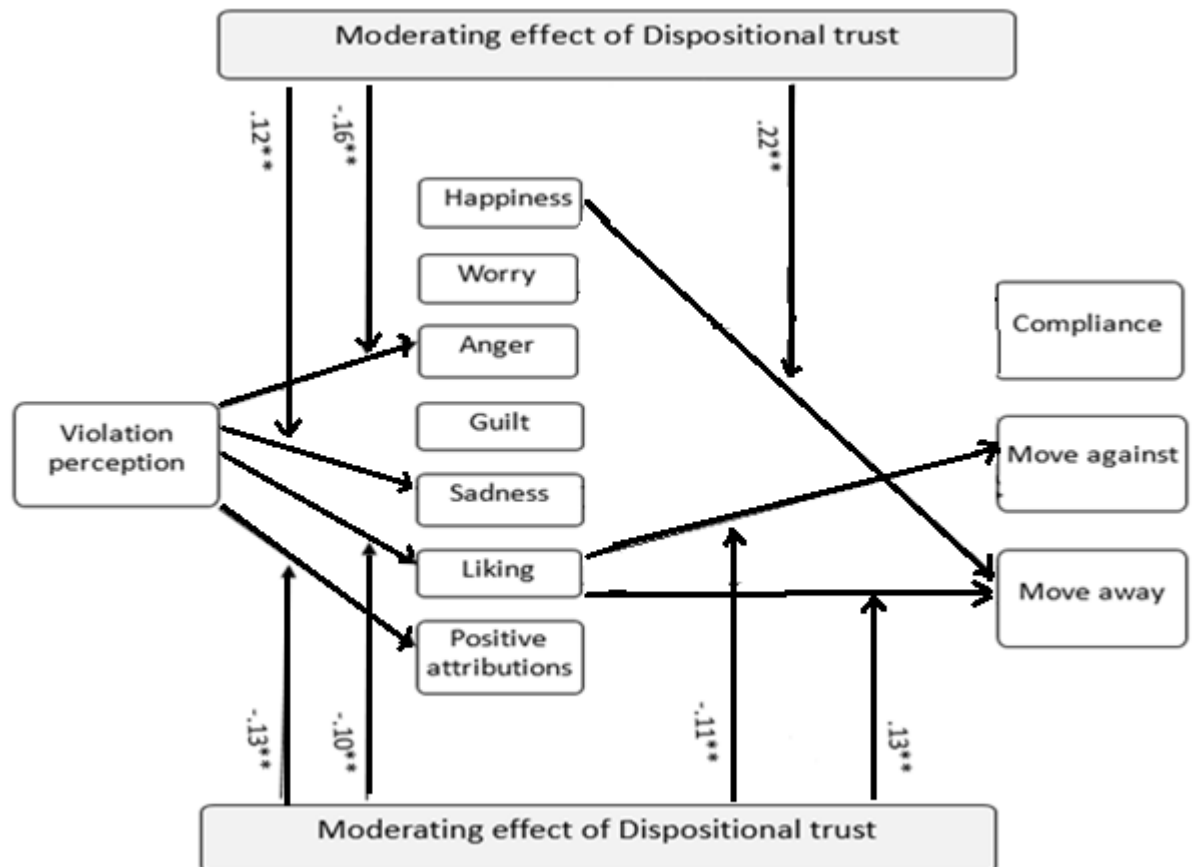


Figure 6.19: Moderating effect of dispositional trust on the outcomes

#### 6.5.2.4 Hypothesis 8- organisational trust

H8: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has higher organisational trust (OT) than when the email recipient has lower OT.

Regression results (Table 6.17) reveal that higher OT individuals experienced more happiness and are more likely to comply with the email sender's request at  $p < .01$ . Differences between participants with high and low OT in the other affective, behavioural reactions and attributions were not significant.

To test whether the differences found between the two levels of OT may affect the reactions variables a series of hierarchical regressions was conducted to test the moderating effect of OT on the affective and behavioural reactions.

- *Moderating effects- organisational trust on the relationships between violation perception and affective responses*

OT significantly moderated the effect of violation perception on happiness (Table 6.27) ( $\beta = -.109$ ,  $p < .01$ ), ( $\Delta R^2 = .012$ ,  $F(1,735) = 11.64$ ,  $p < .01$ ). The simple slope (Figure 6.20) indicates that high OT



increases happiness response. In addition, OT significantly moderated the effect of violation perception on anger (Table 6.27) ( $\beta = -.115$ ,  $p < .01$ ), ( $\Delta R^2 = .013$ ,  $F(1,735) = 10.04$ ,  $p < .01$ ). The simple slope (Figure 6.21) shows that high OT reduces the effect of violation perception on anger, so it has a positive moderating effect. Moreover, OT significantly moderated the effect of violation perception on sadness (Table 6.27) ( $\beta = -.137$ ,  $p < .001$ ), ( $\Delta R^2 = .019$ ,  $F(1,735) = 14.14$ ,  $p < .001$ ). The simple slope (Figure 6.22) indicates that high OT reduces the effect of violation perception on sadness, so it has a positive effect.

- *Moderating effects- organisational trust on the relationships between violation perception and attributions*

OT significantly moderated the effect of violation on positive attributions (Table 6.27) ( $\beta = -.096$ ,  $p < .01$ ), ( $\Delta R^2 = .019$ ,  $F(1,735) = 9.21$ ,  $p < .01$ ). The simple slope (Figure 6.23) indicates that high OT increases positive attributions, when participants perceived low violation perception; however, OT has a minimal moderating effect when VP is high.

Table 6.27: Hierarchical regression testing the moderating role of organisational trust on the relationship between violation perception and happiness, anger, sadness, positive attributions responses

Model		Happiness		Anger		Sadness		Positive attributions	
		$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
1	Step 1	.236**		.021**		.008*		.265**	
	Violation		-.434**		.145**		-.013		-.477**
	Organisational trust		.139**		-.004		-.093*		.112**
2	Step 2	.012**		.013**		.019**		.009**	
	Violation		-.427**		.153**		-.003		-.471**
	Organisational trust		.140**		-.004		-.093*		.112**
	Violation x Organisational Trust		-.109**		-.115**		-.137**		-.096**



Figure 6.20: Simple slope graph indicating how organisational trust moderates the effect of violation perception on happiness

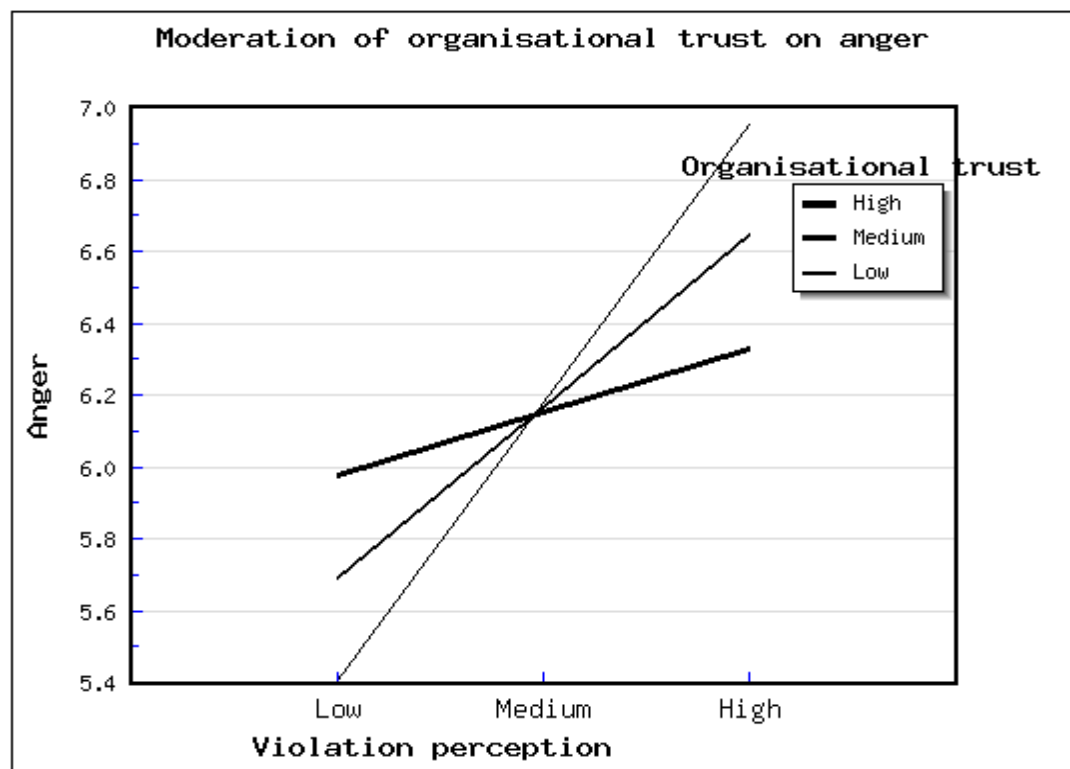


Figure 6.21: Simple slope graph indicating how organisational trust moderates the effect of violation perception on anger

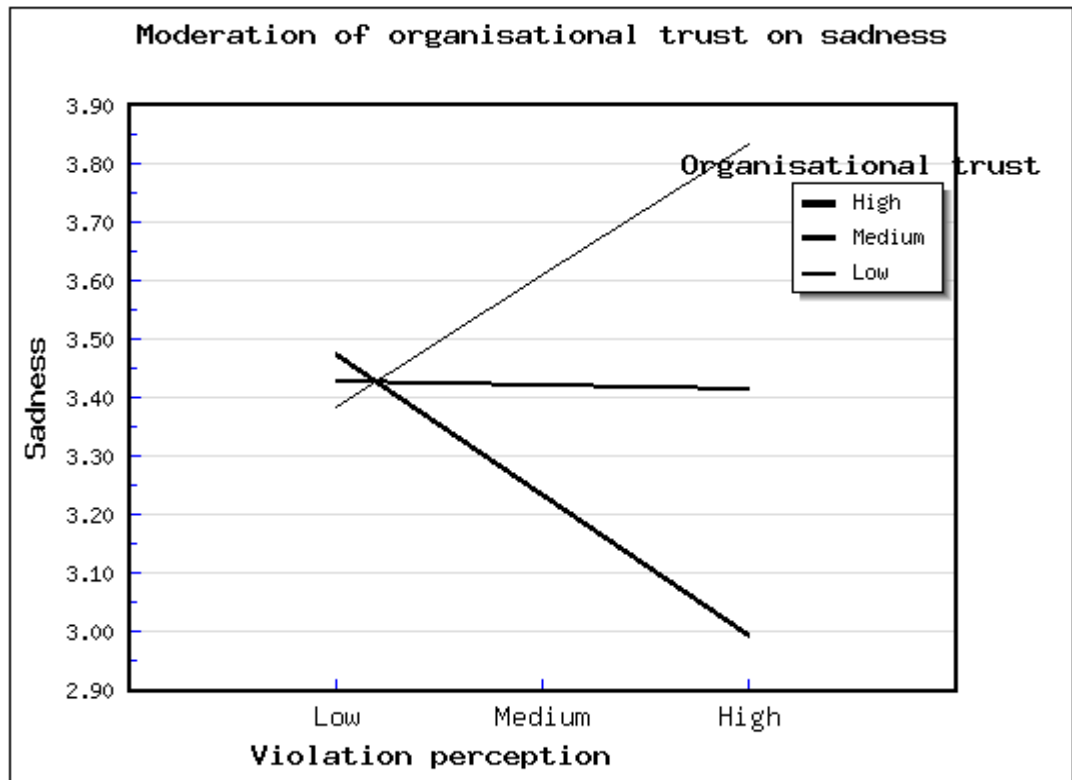


Figure 6.22: Simple slope graph indicating how organisational trust moderates the effect of violation perception on sadness



Figure 6.23: Simple slope graph indicating how organisational trust moderates the effect of violation perception on positive attributions

- *Moderating effects- organisational trust on the relationships between affective responses and the behavioural reactions of compliance and move against*

OT did not moderate the relationship between affective responses and the behavioural reaction of compliance or the move against tendency.

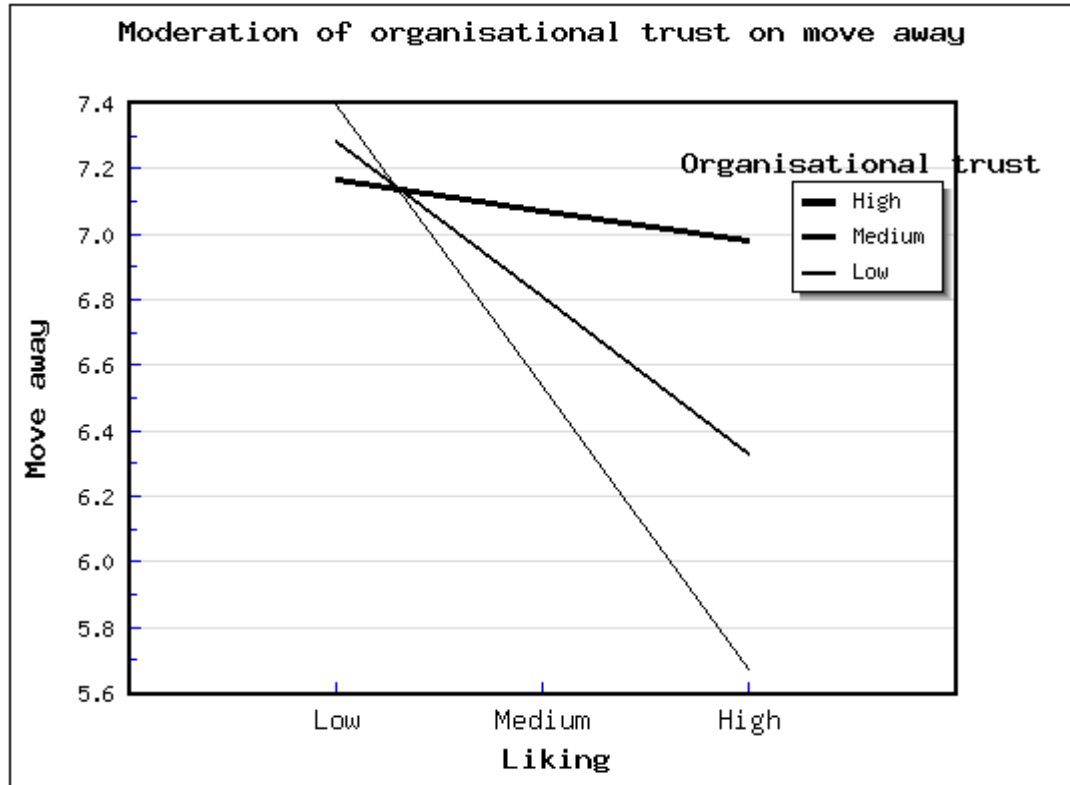


Figure 6.24: Simple slope graph indicating how organisational trust moderates the effect of liking on the tendency to move away

- *Moderating effects- organisational trust on the relationships between affective responses and the move away reaction*

OT significantly moderated the effect of liking on move away, after controlling for violation perception (Table 6.28) ( $\beta=.137, p<.001$ ), ( $\Delta R^2=.018, F(1,734)=13.87, p<.001$ ). The simple slope (Figure 6.24) indicates that when participants like the email sender, their tendency to move away from the sender reduces as their OT decreases.

Table 6.28: Hierarchical regression results testing the moderating role of organisational trust on the relationship between liking and move away, controlling violation perception

Model		$\Delta R^2$	$\beta$
1	Step 1	.009*	
	Violation		.093*
2	Step 2	.017**	
	Violation		.042
	Organisational trust		.078
	Liking		-.131**
3	Step 3	.018**	
	Violation		.043
	Organisational trust		.087*
	Liking		-.154**
	(Liking x Organisational Trust)		.137**

In conclusion, higher OT individuals experienced more happiness and were more likely to comply with the email sender's request than individuals with low OT. In addition, OT moderated the relationship between violation perception and the four outcome variables of happiness, anger, sadness, and positive attributions, and also moderated the relationship between liking and the move away tendency (Figure 6.25). High OT increases happiness response, reduces anger and sadness. High OT also increases positive attributions. Hypothesis 8 was therefore partially supported. Few significant findings support the notion of a positive impact of recipient's OT on reactions to email norm violation. However, high OT also increases the tendency to ignore the email sender. Apart from these significant findings, higher and lower OT individuals had almost similar reactions towards the email sender. In addition, a greater effect of dispositional trust on reactions to email norm violation was found, especially on the behavioural reactions, than that of OT, which may indicate the importance of the former over the latter.

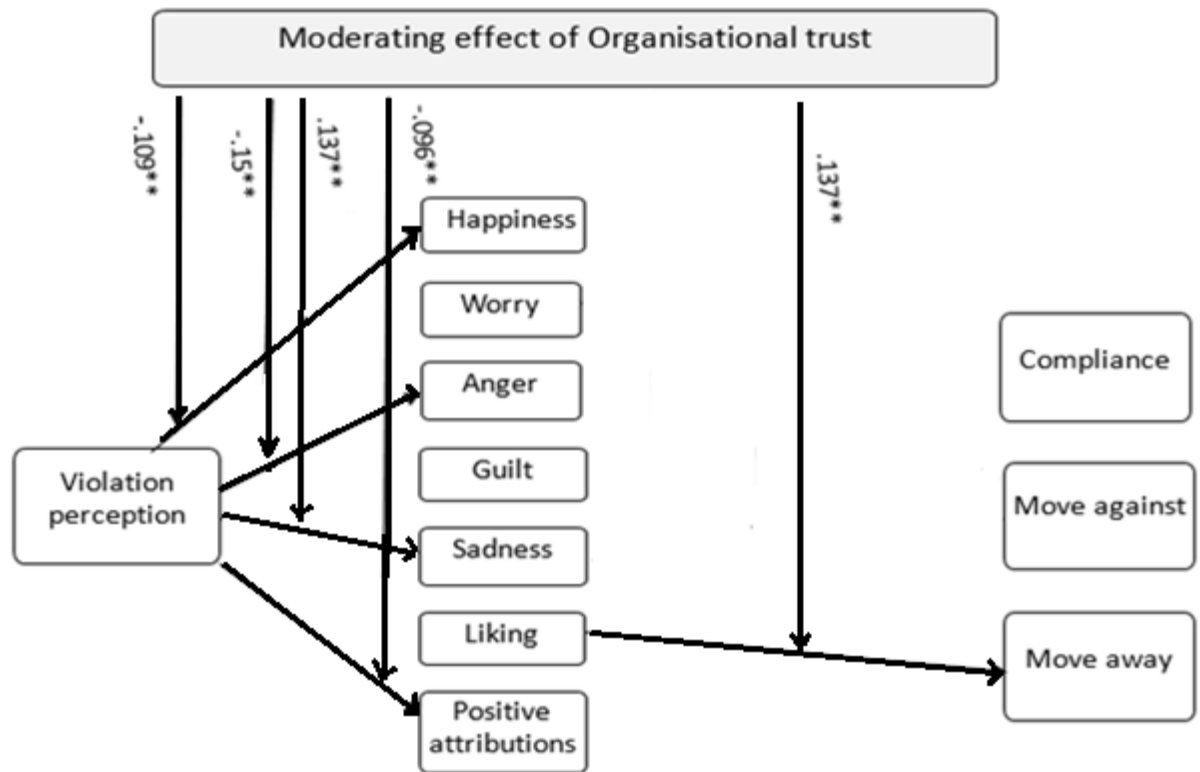


Figure 6.25: Moderating effect of organisational trust on the outcomes

#### 6.5.2.5 Hypothesis 9- extraversion

H9: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has higher scores in extraversion than the email recipient who has lower scores in extraversion.

The correlation results (Table 6.9) indicates that extraversion is positively correlated with emotional stability ( $r(742) = .41, p < .01$ ). Therefore, a series of regression analyses including these two variables was conducted (Table 6.18), showing that that higher extraversion individuals experienced less sadness and were more likely to comply with the email sender's request ( $p < .01$ ) than individuals with low extraversion. This indicates that individuals with high or low extraversion reacted to the email message in a similar way, apart from sadness and compliance, which may show the limitation of the extraversion effect on the reaction to the email message. Table 6.19 shows means and standard deviations comparing high/low extraversion and emotional stability groups on outcome variables.

Hierarchical regression was performed to test whether the differences found in extraversion may have moderating effects on the affective and behavioural reactions. The results revealed no significant moderation effects of extraversion on the relationship between email violation perception and emotional reactions or between emotional and behavioural reactions. Hypothesis 9 was not

supported. There were no significant influences of low extraversion on recipient's affective, behavioural reactions and attributions.

#### *6.5.2.6 Hypothesis 10- emotional stability*

H10: Participants would make more positive attributions, show a less negative affective response, and show a less negative behavioural response when the email recipient has higher scores in emotional stability than the email recipient who has lower scores in emotional stability.

Regression results (Table 6.18) show no significant differences between individuals with high and low emotional stability. Hierarchical regressions did not reveal any significant moderating effect of the emotional stability factor on the affective or behavioural reactions. The results showed no moderation effects of emotional stability on the relationship between email violation perception and emotional reactions or between emotional and behavioural reactions. Hypothesis 10 was not supported indicating that individuals with high emotional stability and others with low emotional stability had similar reactions towards the email sender.

In sum, the higher extraversion group experienced less sadness and were more likely to comply with the email sender's request than the low extraversion group, with no significant differences found between participants with high and low extraversion in all other affective and behavioural reactions and attributions. As individuals with high or low extraversion reacted to the email message in similar ways, apart from sadness and compliance, this demonstrated that the extraversion effect on the reactions to email norm violation might be limited. However, no significant differences in affective and behavioural reactions were found between individuals with high and low emotional stability. Regarding the moderation analysis, this did not show any significant effect of the recipient's level of extraversion or emotional stability on the affective or behavioural reactions to email norm violation (Hypotheses 9 and 10 were not supported), and the outcome variables were not reduced or increased by the level of extraversion or emotional stability, indicating that these traits may have had no influence on the recipient's reactions.

#### *6.5.2.7 Summary of findings for Hypotheses 5–10*

High global identity increases happiness, liking, and positive attributions, increases the tendency to move away. High local identity decreases positive attributions and compliance. High dispositional trust increases the tendency to like the email sender, positive attributions and move away tendency, and reduces the tendency to anger, sadness, and to move against the sender. High

organisational trust increases happiness response, reduces anger and sadness, increases positive attributions, but increases participants' tendency to move away from the sender. There were no moderation effects of extraversion or emotional stability on the relationship between email violation perception and emotional reactions or between emotional and behavioural reactions. In conclusion, the Study 2 model (Figure 2.4) supports the moderating effect of global identity and dispositional trust, with little support for the effect of local identity and organisational trust, and no support for the effect of extraversion and emotional stability (see Figure 6.36, Hypotheses 5-10).

### **6.5.3 Interaction Effects of Global/Local Identity, Dispositional/ Organisational Trust and Extraversion/ Emotional Stability with Email Sender's Culture (Hypotheses 11-16)**

This section presents the results to determine the interaction effects of email sender's culture with global identity, local identity, dispositional trust, organisational trust, extraversion and emotional stability personality traits on the study outcomes (Hypotheses 11-16).

#### *6.5.3.1 Hypothesis 11- interaction between global identity and email sender's culture*

Participants would make more positive attributions (H11a), show a less negative affective response (H11b), and show a less negative behavioural response (H11c) when the email recipient has a higher global identity and the email sender is from a different culture than the email recipient who has a lower global identity and the sender is from the same culture.

To test hypothesis a 2 (global identity: high/low) x 2 (sender's culture: same/different) ANOVA was conducted. Appendix H1 shows the ANOVA results.

- *H11a: Attributions*

There was no significant interaction effect of global identity and sender's culture on positive attributions  $F(1,742) = .16, p = .70$ . Hypothesis 11a was not supported.

- *H11b: Affective reactions*

There was no significant interaction effect of global identity and sender's culture on affective responses (Appendix H1). Hypothesis 11b was not supported for happiness, worry, anger, guilt, sadness and liking.



- *H11c: Behavioural reactions*

There was no significant interaction effect (at  $p < .01$ ) of global identity and sender's culture on compliance, move against and move away (Appendix H1). Hypothesis 11c was not supported for compliance, move against and move away tendencies.

- *Summary*

Participants did not make more positive attributions, or show less negative affective responses or behavioural reactions when the email recipient had a higher global identity and the email sender was from a different culture than the email recipient who had a lower global identity and the sender is from the same culture. Therefore, Hypothesis 11 was rejected, suggesting no interaction effect of global identity and sender's culture affecting the recipient's reactions to email violation.

#### *6.5.3.2 Hypothesis 12- interaction between local identity and email sender's culture*

Participants would make more positive attributions (H12a), show a less negative affective response (H12b), and show a less negative behavioural response (H12c) when the email recipient has a lower local identity and the email sender is from a different culture than the email recipient who has a higher local identity and the sender is from the same culture.

To test Hypothesis 2 (local identity: high/low) x 2 (sender's culture: same/different) ANOVA was conducted. Appendix H2 shows the ANOVA results.

- *H12a: Attributions*

There was no significant interaction effect of local identity and sender's culture on positive attributions  $F(1,742) = .07$ ,  $p = .79$ . Hypothesis 12a was not supported.

- *H12b: Affective reactions*

There was no significant interaction effect of local identity and sender's culture on happiness, worry, anger, guilt, sadness and liking (Appendix H2). Hypothesis 12b was not supported at  $P < .01$

- *H12c: Behavioural reactions*

There was no significant interaction effect of local identity and sender's culture on compliance move against and move away. Hypothesis 12c was not supported for compliance, move against and move away tendencies.

- *Summary*

Hypothesis 12 was not supported. Participants did not make less positive attributions, show more negative emotional or behavioural reactions when the sender is of the same culture and the recipient has high local identity than when sender has a different culture and the recipient has low local identity. This also indicates no interaction effect of local identity and sender's culture on varying the recipient's reactions.

#### *6.5.3.3 Hypothesis 13- interaction between dispositional trust and sender's culture*

Participants would make more positive attributions (H13a), show a less negative affective response (H13b), and show a less negative behavioural response (H13c) when the email recipient has higher dispositional trust and the sender is from a different culture than when the email recipient has lower dispositional trust and the sender is from the same culture.

To test this Hypothesis 2 (dispositional trust: high/low) x 2 (sender's culture: same/different) between groups ANOVA was conducted. Appendix H4 shows the results.

- *H13a: Attributions*

There was no significant interaction effect of dispositional trust and sender's culture on positive attributions  $F(1,742) = .11, p=.74$ . Hypothesis 13a was not supported.

- *H13b: Affective reactions*

There was no significant interaction effect of dispositional trust and sender's culture on happiness  $F(1,742) = .89, p=.35$ , worry  $F(1,742) = .10, p=.75$ , anger  $F(1,742) = .65, p=.42$ , guilt  $F(1,742) = .04, p=.84$ , sadness  $F(1,742) = 1.58, p=.21$ , liking  $F(1,742) = .05, p=.83$ . Hypothesis 13b was not supported for happiness, worry, anger, guilt, sadness and liking.

- *H13c: Behavioural reactions*

There was no significant (at  $p<.01$ ) interaction effect of dispositional trust and sender's culture on the three behavioural reaction variables. Hypothesis 13c was not supported for compliance, move against tendency and move away tendency (Appendix H3).

- *Summary*

Hypothesis 13 was not supported. People with low dispositional trust did not make less positive attributions, and show more negative affective or behavioural reactions when the email sender was from the same culture. Moreover, people with high dispositional trust did not react more positively

towards the sender from a different culture. This suggests no interaction effect of dispositional trust and sender's culture on the recipient's reactions to email violation.

#### *6.5.3.4 Hypothesis 14- interaction between organisational trust and sender's culture*

Participants would make more positive attributions (H14a), show a less negative affective response (H14b), and show a less negative behavioural response (H14c) when the email recipient has higher organisational trust and the sender is from a different culture than the email recipient has lower organisational trust and the sender is from the same culture.

To test Hypothesis 2 (organisational trust: high/low) x 2 (sender's culture: same/different) ANOVA was conducted. Appendix H4 shows the ANOVA results.

- *H14a: Attributions*

There was no significant interaction effect of organisational trust and sender's culture on positive attributions  $F(1,742) = 2.18, p=.14$ . Hypothesis 14a was not supported.

- *H14b: Affective reactions*

There was no significant interaction effect of organisational trust and sender's culture on happiness  $F(1,742) = .98, p=.32$ , worry  $F(1,742) = .42, p=.52$ , anger  $F(1,742) = 2.59, p=.11$ , guilt  $F(1,742) = .30, p=.59$ , sadness  $F(1,742) = .70, p=.40$  and liking  $F(1,742) = .14, p=.71$ . Hypothesis 14b was not supported for all affective reactions.

- *H14c: Behavioural reactions*

There was no significant interaction effect of organisational trust and sender's culture on compliance  $F(1,740) = .78, p=.38$ , move against  $F(1,742) = 1.68, p=.20$ , and move away tendencies  $F(1,742) = .00, p=.99$ . Hypothesis 14c was not supported for all three behavioural reactions.

- *Summary*

The findings revealed that Hypothesis 14 was not supported for positive attributions, affective and behavioural reactions, indicating no interaction effect of organisational trust and sender's culture on the recipient's reactions.

#### *6.5.3.5 Hypothesis 15- interaction between extraversion and sender's culture*

Participants would make more positive attributions (H15a), show a less negative affective response (H15b), and show a less negative behavioural response (H15c) when the email recipient has

higher extraversion and the sender is from a different culture than the email recipient who has lower extraversion and the sender is from a different culture.

To test this Hypothesis 2 (extraversion: high/low) x 2 (sender's culture: same/different) ANOVA was conducted. Appendix H5 shows the ANOVA results.

- *H15a: Attributions*

There was no significant interaction effect of extraversion and sender's culture on positive attributions  $F(1,742) = .19, p=.67$ . Hypothesis 15a was not supported.

- *H15b: Affective reactions*

There was no significant interaction effect of extraversion and sender's culture on anger  $F(1,742) = 2.03, p=.16$ , sadness  $F(1,742) = .75, p=.39$ , happiness  $F(1,742) = .03, p=.87$ , worry  $F(1,742) = .20, p=.66$ , guilt  $F(1,742) = .54, p=.46$ , and liking  $F(1,742) = .07, p=.79$ . Hypothesis 15b was not supported.

- *H15c: Behavioural reactions*

There was no significant interaction effect of extraversion and sender's culture on compliance  $F(1,740) = .82, p=.37$ , move against  $F(1,742) = .34, p=.56$ , and move away  $F(1,742) = 1.31, p=.25$ . Hypothesis 15c was not supported.

- *Summary*

Hypothesis 15 was not supported, indicating that the participants' reactions to the email message did not vary by their level of extraversion and the sender's cultural background.

#### *6.5.3.6 Hypothesis 16- interaction between emotional stability and sender's culture*

Participants would make more positive attributions (H16a), show a less negative affective response (H16b), and show a less negative behavioural response (H16c) when the email recipient has higher emotional stability and the sender is from a different culture than the email recipient who has lower emotional stability and the sender is from a different culture.

To test this Hypothesis 2 (emotional stability: high/low) x 2 (sender's culture: same/different) ANOVA was conducted. Appendix H6 shows the ANOVA results.

- *H16a: Attributions*

There was no significant interaction effect of emotional stability and sender's culture on positive attributions  $F(1,742) = .63, p=.43$ . Hypothesis 16a was not supported.

- *H16b: Affective reactions*

There was no significant interaction effect of emotional stability and sender's culture on anger  $F(1,742) = 2.84, p=.09$ , sadness  $F(1,742) = .18, p=.67$ , happiness  $F(1,742) = .05, p=.82$ , worry  $F(1,742) = .09, p=.77$ , guilt  $F(1,742) = .28, p=.60$ , and liking  $F(1,742) = .51, p=.48$ . Hypothesis 16b was not supported.

- *H16c: Behavioural reactions*

There was no significant interaction effect of emotional stability and sender's culture on compliance  $F(1,740) = 1.85, p=.17$ , move against  $F(1,742) = .64, p=.43$ , and move away  $F(1,742) = .69, p=.41$ . Hypothesis 16c was not supported.

- *Summary*

Hypothesis 16 was not supported indicating that the participants' reactions to the email message were not varied by their level of emotional stability and the sender's cultural background.

#### 6.5.3.7 Summary of hypotheses 11–16

The findings revealed that Hypotheses 11 to 16 regarding the interaction effect between the email sender's culture and the recipient's characteristics (global identity, local identity, dispositional trust, organisational trust, extraversion, and emotional stability) were not supported for positive attributions, affective, and behavioural reactions. This indicates that the recipient's reactions were not influenced by their level of these characteristics and the sender's culture at the same time (Figure 6.36).

#### 6.5.4 Interaction Effects of Global/Local identity, Dispositional/ Organisational Trust and Extraversion/ Emotional Stability with Email Sender's Status (Hypotheses 17-22)

This section presents the first ever results to determine the interaction effects of email sender's status with global identity, local identity, dispositional trust, organisational trust, extraversion and emotional stability personality traits on the study outcomes (Hypotheses 17-22).

#### 6.5.4.1 Hypothesis 17- interaction between global identity and email sender's status

Participants would make more positive attributions (H17a), show a less negative affective response (H17b), and show a less negative behavioural response (H17c) when the email recipient has a higher global identity and the email sender is from the same status than the email recipient who has a lower global identity and the sender is from different status.

To test hypothesis a 2 (global identity: high/low) x 3 (sender's status: same/high/low) ANOVA was conducted. Appendix I1 shows the ANOVA results.

- *H17a: Attributions*

There was no significant interaction effect of global identity and sender's status on positive attributions  $F(1,742) = .61$ ,  $p = .54$ . Hypothesis 17a was not supported.

- *H17b: Affective reactions*

There was significant interaction effect of global identity and sender's status on anger  $F(1,742) = 5.59$ ,  $p < .01$  (see Figure 6.26), but not happiness, worry, sadness, guilt and liking. Hypothesis 17b was confirmed for anger only and not supported for happiness, worry, sadness, guilt and liking. Figure 6.26 shows that status moderates anger, but only for recipients with high global identity. People with high global identity react with more anger towards the same status email sender.

- *H17c: Behavioural reactions*

There was a significant interaction effect of global identity and sender's status on move against  $F(1,742) = 5.18$ ,  $p < .01$ ; and move away  $F(1,742) = 6.38$ ,  $p < .01$  only but not compliance. Hypothesis 17c was supported for move against and move away tendencies and not supported for compliance. Figures 6.27-6.28 show that status moderates move against and move away tendencies. Individuals with low global identity had more tendency to move against the sender who was from different (low or high) status. People with high global identity had less tendency to move away from the sender who was from the same status.

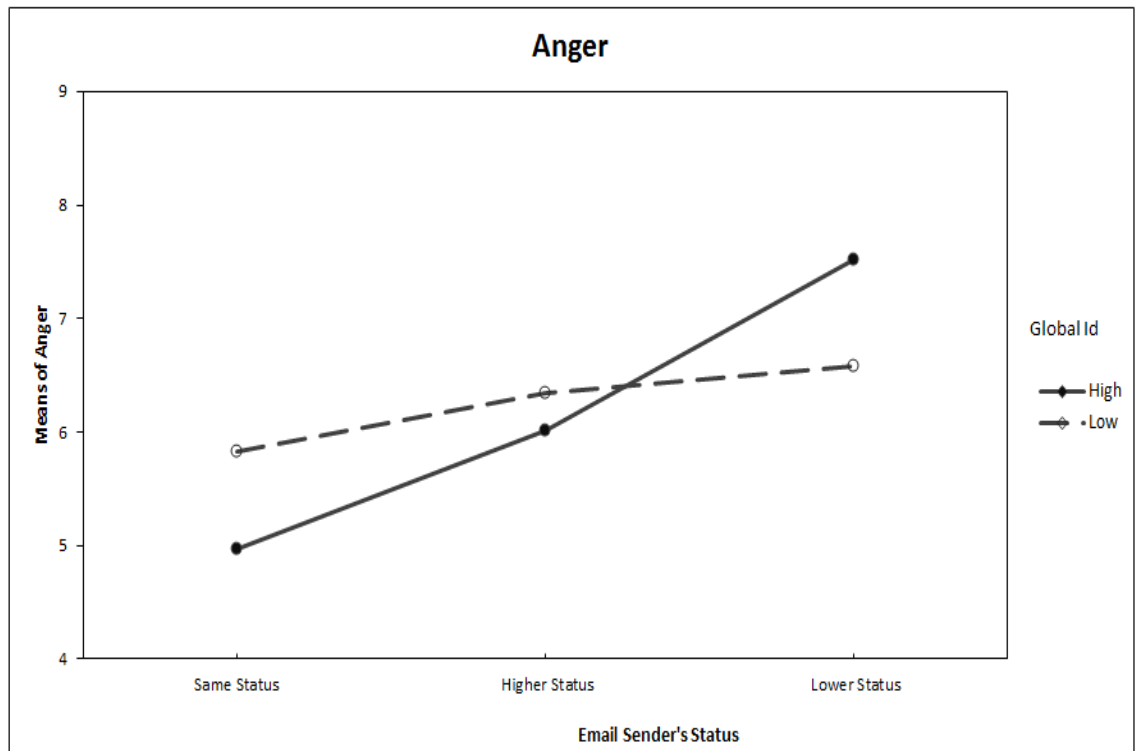


Figure 6.26: Interaction of sender's status and recipient's global identity on anger

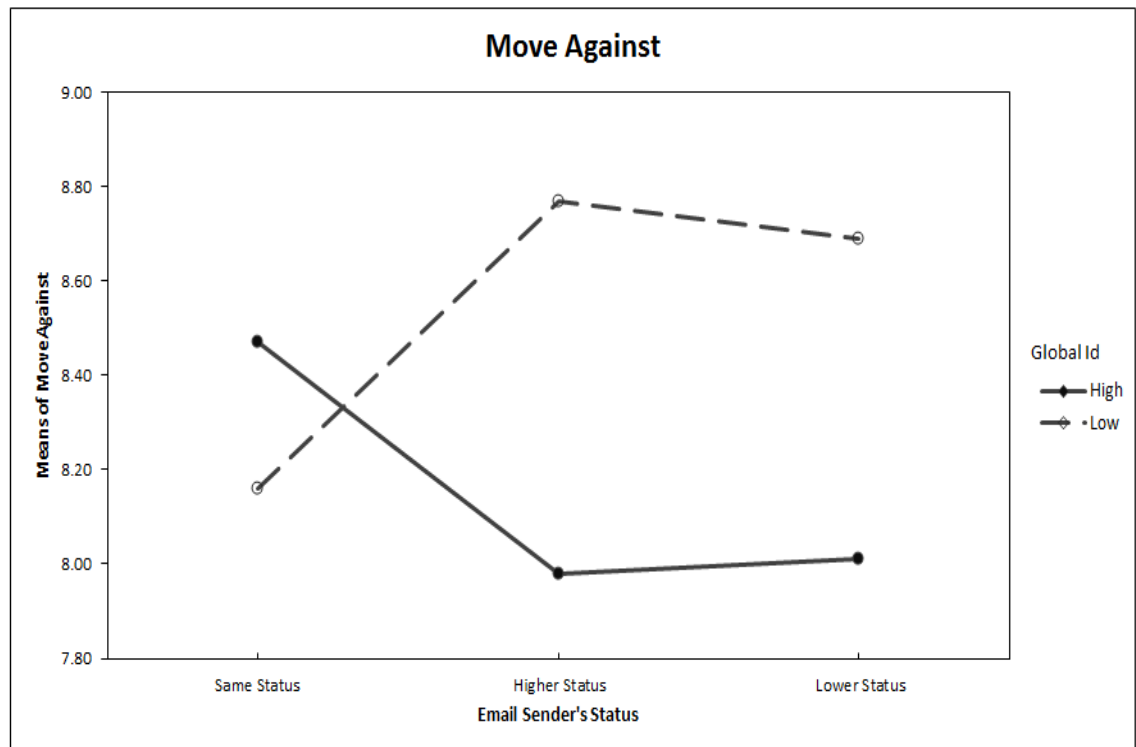


Figure 6.27: Interaction of sender's status and recipient's global identity on move against

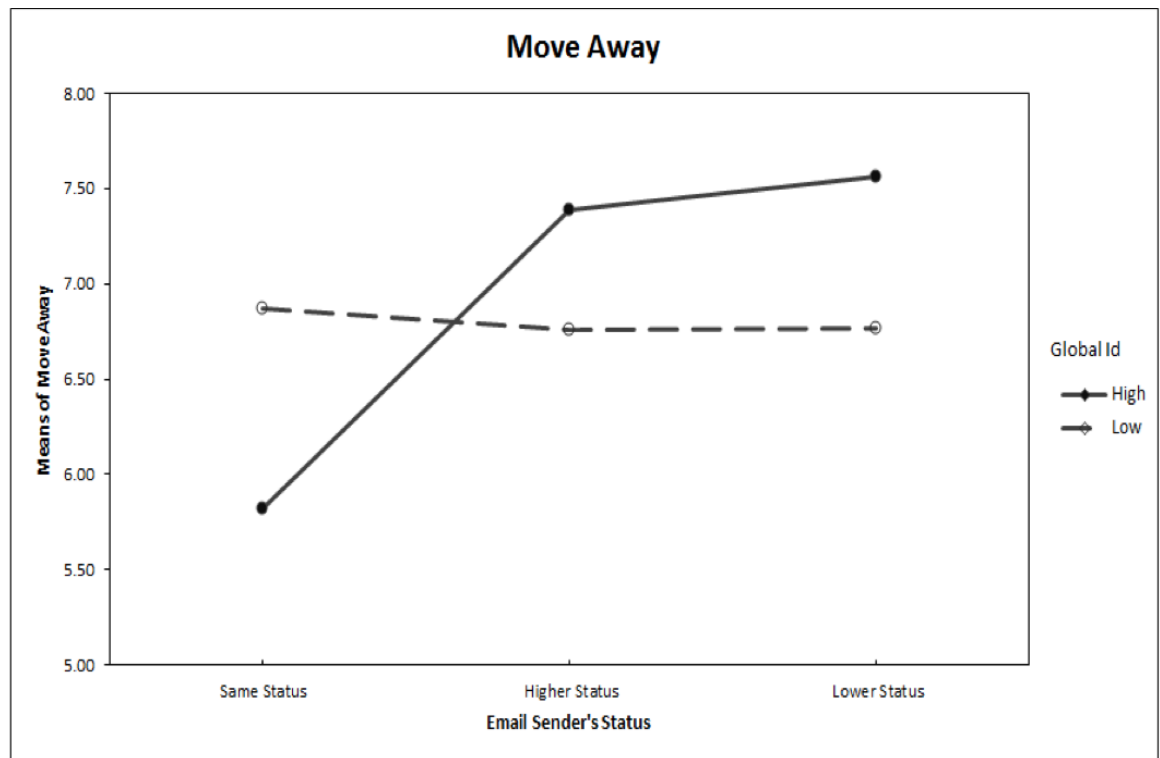


Figure 6.28: Interaction of sender's status and recipient's global identity on move away

#### ▪ Summary

The findings revealed that Hypothesis 17 was not supported for positive attributions. For affective responses, Hypothesis 17 was confirmed for anger only and not supported for happiness, worry, sadness, guilt and liking. For behavioural reactions, Hypothesis 17 was confirmed for move against and move away tendencies and not supported for compliance, indicating partial support for Hypothesis 17. This suggests an interaction effect of recipient's global identity and sender's status on these reactions. Recipients reacted less negatively when they had higher global identity and the sender was from the same status.

#### 6.5.4.2 Hypothesis 18- interaction between local identity and email sender's status

Participants would make more positive attributions (H18a), show a less negative affective response (H18b), and show a less negative behavioural response (H18c) when the email recipient has a lower local identity and the email sender is from the same than the email recipient who has a higher local identity and the sender is from different status.

To test Hypothesis 2 (local identity: high/low) x 3 (sender's status: same/high/low) ANOVA was conducted. Appendix I2 shows the ANOVA results.



- *H18a: Attributions*

There was no significant interaction effect of local identity and sender's status on positive attributions. Hypothesis 18a was not supported.

- *H18b: Affective reactions*

There was not a significant interaction effect of local identity and sender's status on affective responses. Hypothesis 18b was not supported.

- *H18c: Behavioural reactions*

There was no significant interaction effect of local identity and sender's status on compliance, move against and move away. Hypothesis 18c was not supported for compliance, move against and move away tendencies (Appendix I2).

- *Summary*

The findings revealed that Hypothesis 18 was not supported for positive attributions, affective responses, or behavioural reactions. This suggests no interaction effect of recipient's local identity and sender's status on the recipient's reactions. Recipients reacted in a similar way when they had higher or lower local identity and the sender was from the same or different status.

#### *6.5.4.3 Hypothesis 19- interaction between dispositional trust and sender's status*

Participants would make more positive attributions (H19a), show a less negative affective response (H19b), and show a less negative behavioural response (H19c) when the email recipient has a higher dispositional trust and the sender is from the same status than the email recipient who has a lower dispositional trust and the sender is from different status.

To test this Hypothesis 2 (dispositional trust: high/low) x 3 (sender's status: higher/same/lower) ANOVA was conducted. Appendix I3 shows the ANOVA results.

- *H19a: Attributions*

There was no significant interaction effect of dispositional trust and sender's status on positive attributions  $F(1,742) = 2.09, p=.13$ . Hypothesis 19a was not supported.

- *H19b: Affective reactions*

There was a significant interaction effect of dispositional trust and sender's status on anger  $F(1,742) = 5.63, p<.01$  (see Figure 6.29), and sadness  $F(1,742) = 5.11, p<.01$  (see Figure 6.30), but not on happiness, worry, guilt and liking. Hypothesis 19b was confirmed for anger and sadness

and not supported for happiness, worry, guilt and liking (Appendix I3). Figures 6.29-6.30 show that status moderates anger and sadness reactions, but only for recipients with high dispositional trust. These individuals had more anger when the sender has lower status, and less anger when the sender has same status as the email recipient. People with low dispositional trust also react with more anger and sadness towards a low status email sender.

- *H19c: Behavioural reactions*

There was no significant interaction effect of dispositional trust and sender's status on compliance, move against and move away (Appendix I3). Hypothesis 19c was not supported.

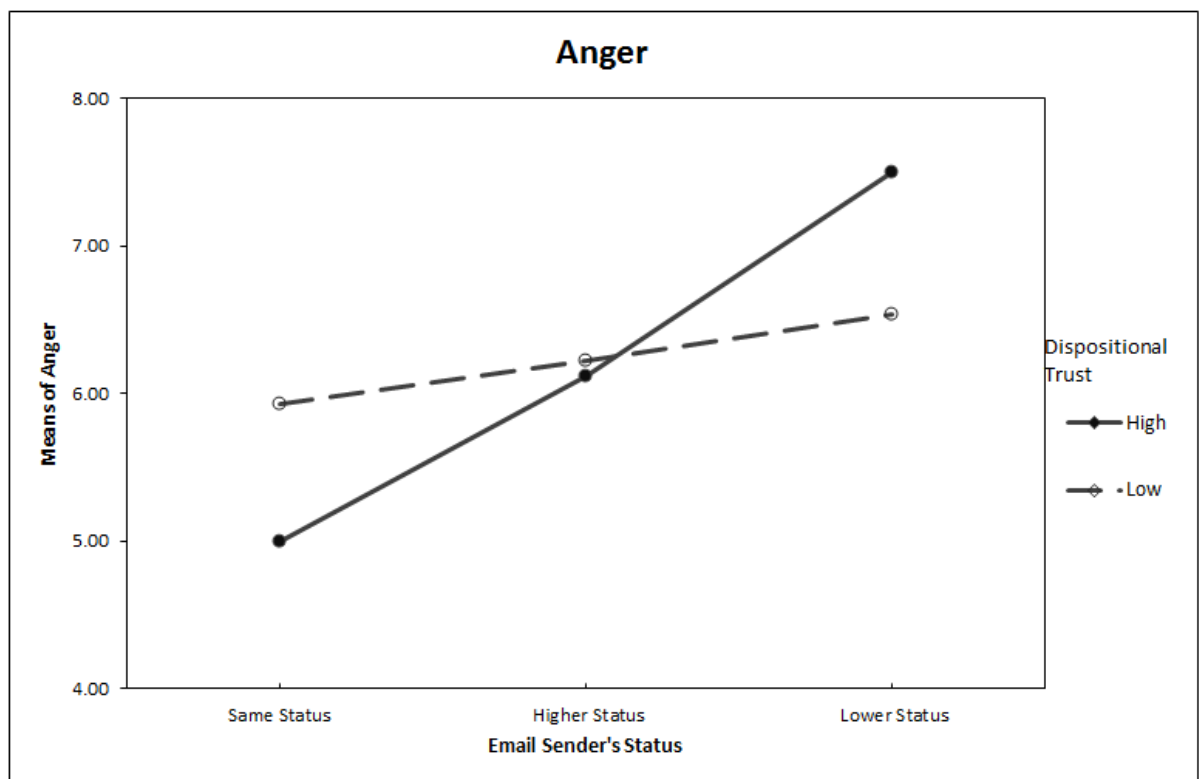


Figure 6.29: Interaction effect of sender's status and dispositional trust on anger

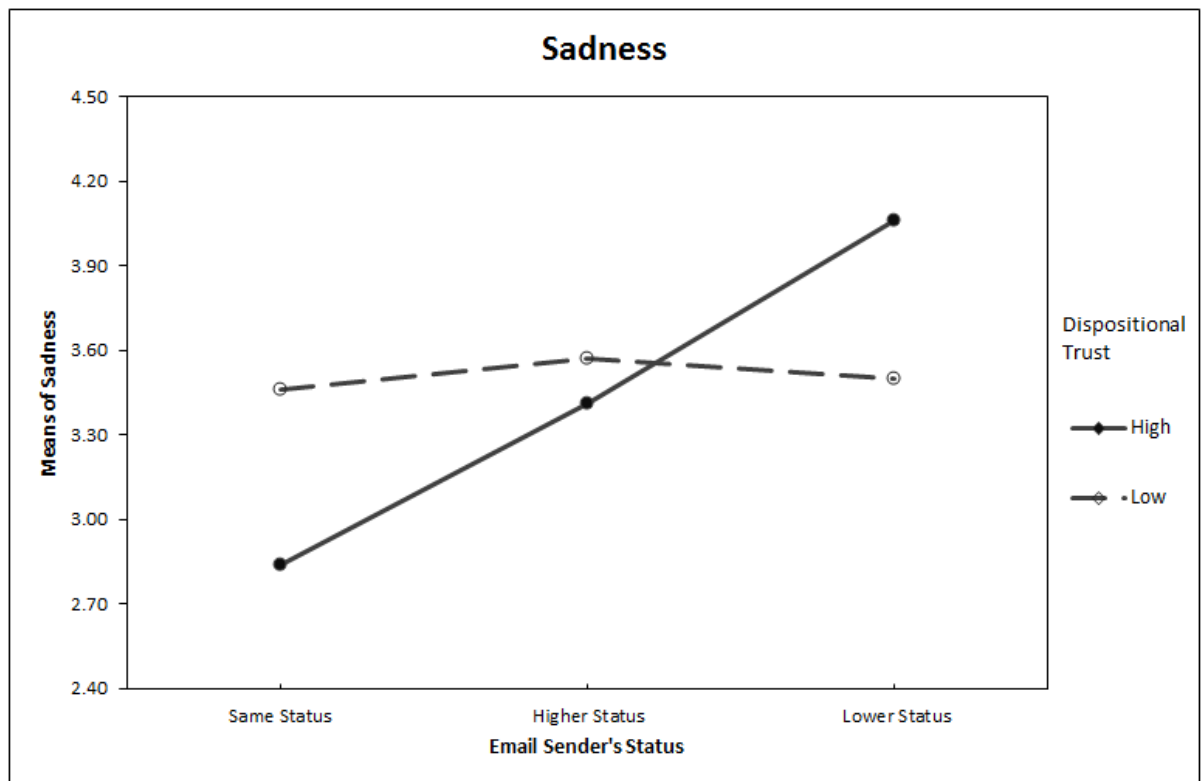


Figure 6.30: Interaction effect of sender's status and dispositional trust on sadness

#### ▪ Summary

The findings revealed that Hypothesis 19 was not supported for positive attributions or behavioural reactions. For affective responses, Hypothesis 19 was confirmed for anger and sadness but not for happiness, worry, guilt, and liking, indicating partial support for Hypothesis 19. This suggests an interaction effect of recipient's dispositional trust and sender's status on these two affective responses. Recipients reacted less negatively when they had higher dispositional trust and the sender was from the same status.

#### 6.5.4.4 Hypothesis 20- interaction between organisational trust and sender's status

Participants would make more positive attributions (H20a), show a less negative affective response (H20b), and show a less negative behavioural response (H20c) when the email recipient has a higher organisational trust and the sender is from the same status than the email recipient who has a lower organisational trust and the sender is from different status.

To test this Hypothesis 2 (organisational trust: high/low) x 3 (sender's status: higher/same/lower) ANOVA was conducted. Appendix I4 shows the ANOVA results.

- *H20a: Attributions*

There was no significant interaction effect of organisational trust and sender's status on positive attributions  $F(1,742) = 2.46, p=.09$ . Hypothesis 20a was not supported.

- *H20b: Affective reactions*

There was no significant interaction effect of organisational trust and sender's status on happiness  $F(1,742) = .12, p=.89$ , worry  $F(1,742) = .04, p=.96$ , anger  $F(1,742) = .85, p=.43$ , guilt  $F(1,742) = .88, p=.41$ , sadness  $F(1,742) = .52, p=.60$ , and liking  $F(1,742) = .57, p=.57$ . Hypothesis 20b was not supported.

- *H20c: Behavioural reactions*

There was no significant interaction effect of organisational trust and sender's status on compliance  $F(1,740) = .09, p=.92$ , move against  $F(1,742) = 1.23, p=.29$ , and move away  $F(1,742) = 1.38, p=.25$ . Hypothesis 20c was not supported.

- *Summary*

The findings revealed that Hypothesis 20 was not supported for positive attributions, affective and behavioural reactions. This suggests no interaction effect of recipient's organisational trust and sender's status on the recipient's reactions. Recipients reacted in a similar way when they had higher or lower organisational trust and the sender was from the same or different status.

#### *6.5.4.5 Hypothesis 21- interaction between extraversion & sender's status*

Participants would make more positive attributions (H21a), show a less negative affective response (H21b), and show a less negative behavioural response (H21c) when the email recipient has higher scores in extraversion and the sender is from the same status than when the email recipient has lower scores in extraversion and the sender is from different status.

To test this Hypothesis 2 (extraversion: high/low) x 3 (sender's status: higher/same/lower) ANOVA was conducted. Appendix I5 shows the ANOVA results.

- *H21a: Attributions*

There was no significant interaction effect of extraversion and sender's status on positive attributions  $F(1,742) = 1.98, p=.14$ . Hypothesis 21a was not supported.

▪ *H21b: Affective reactions*

There was a significant interaction effect of extraversion and sender's status on anger  $F(1,742) = 6.55$ ,  $p < .01$ , and sadness  $F(1,742) = 5.56$ ,  $p < .01$ , but not on happiness, worry, guilt or liking (Appendix I5). Hypothesis 21b was confirmed for anger and sadness and not supported for happiness, worry, guilt, and liking. Figures 6.31-6.32 show that introverts and extraverts react differently with anger and sadness, depending on the status of the sender (Introverts react with more anger and sadness towards higher status senders, whereas extraverts with more anger and sadness towards lower status senders).

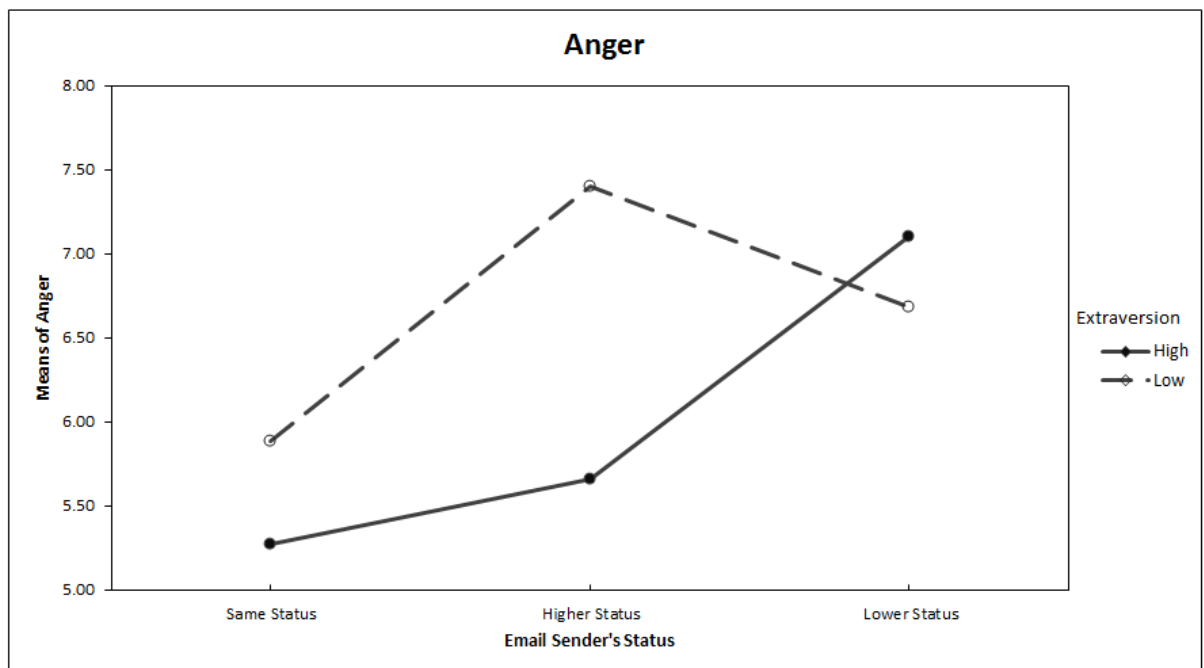


Figure 6.31: Interaction effect of sender status and extraversion on anger

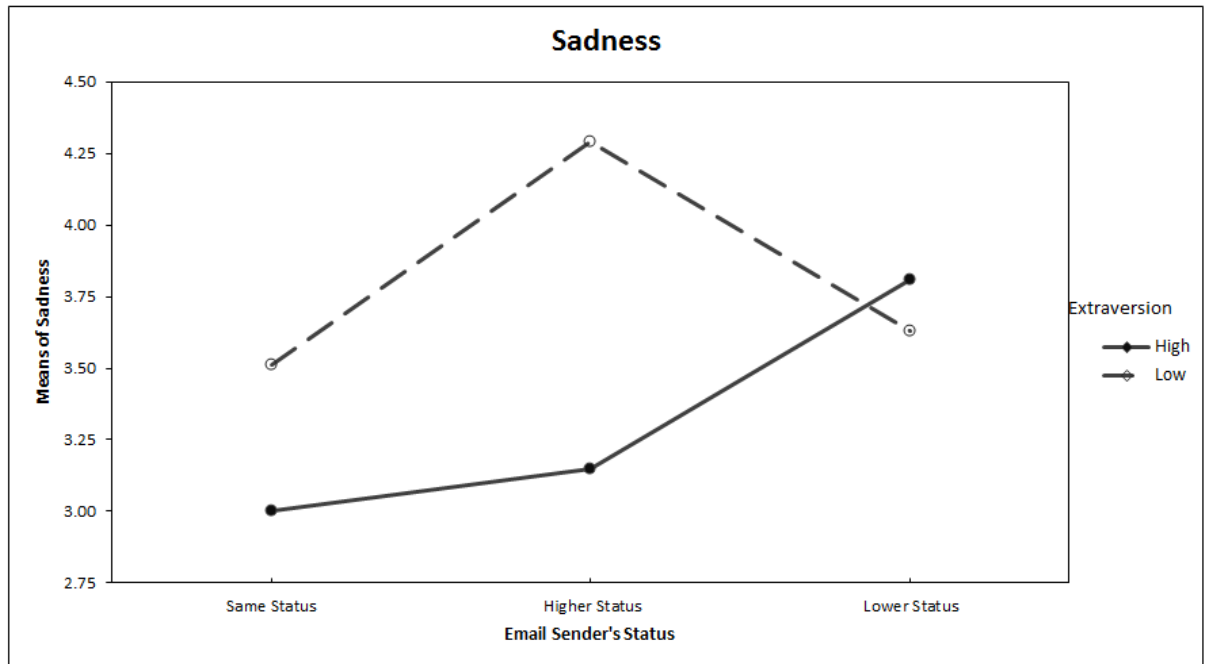


Figure 6.32: Interaction effect of sender status and extraversion on sadness

#### ▪ H21c: Behavioural reactions

There was no significant (at  $p < .01$ ) interaction effect of extraversion and sender's status on compliance, move against, and move away (Appendix I5). Hypothesis 21c was not supported for compliance, move against and move away tendencies. Again, the findings did not show different patterns of behavioural reactions between introverts and extraverts, depending on the status of the sender, with extraverts being more likely to comply with a high status sender, whereas introverts are less compliant overall, and least towards a high status sender.

#### ▪ Summary

The findings revealed that Hypothesis 21 was confirmed for anger and sadness but not for attributions or other affective and behavioural reactions, indicating partial support for Hypothesis 21. This suggests an interaction effect of recipient's extraversion and sender's status on anger, sadness and compliance. Recipients reacted less negatively when they had higher extraversion and the sender was from the same status.

#### 6.5.4.6 Hypothesis 22- interaction between emotional stability & sender's status

Participants would make more positive attributions (H22a), show a less negative affective response (H22b), and show a less negative behavioural response (H22c) when the email recipient has higher scores in emotional stability and the sender is from the same status than the email recipient who has lower scores in emotional stability and the sender is from different status.

To test this Hypothesis 2 (emotional stability: high/low) x 3 (sender's status: higher/same/ lower) ANOVA was conducted. Appendix I6 shows the ANOVA results.

- *H22a: Attributions*

There was no significant interaction effect of emotional stability and sender's status on positive attributions  $F(1,742) = 2.29, p=.10$ . Hypothesis 22a was not supported.

- *H22b: Affective reactions*

There was a significant interaction effect of emotional stability and sender's status on anger  $F(1,742) = 4.80, p<.01$ , but not on happiness, worry, guilt, sadness and liking. Hypothesis 22b was confirmed for worry and not supported for happiness, anger, guilt, sadness and liking.

Figure 6.33 shows that both high and low emotional stability groups react with most anger towards a lower status email sender, but the anger reaction is stronger in recipients with lower emotional stability.

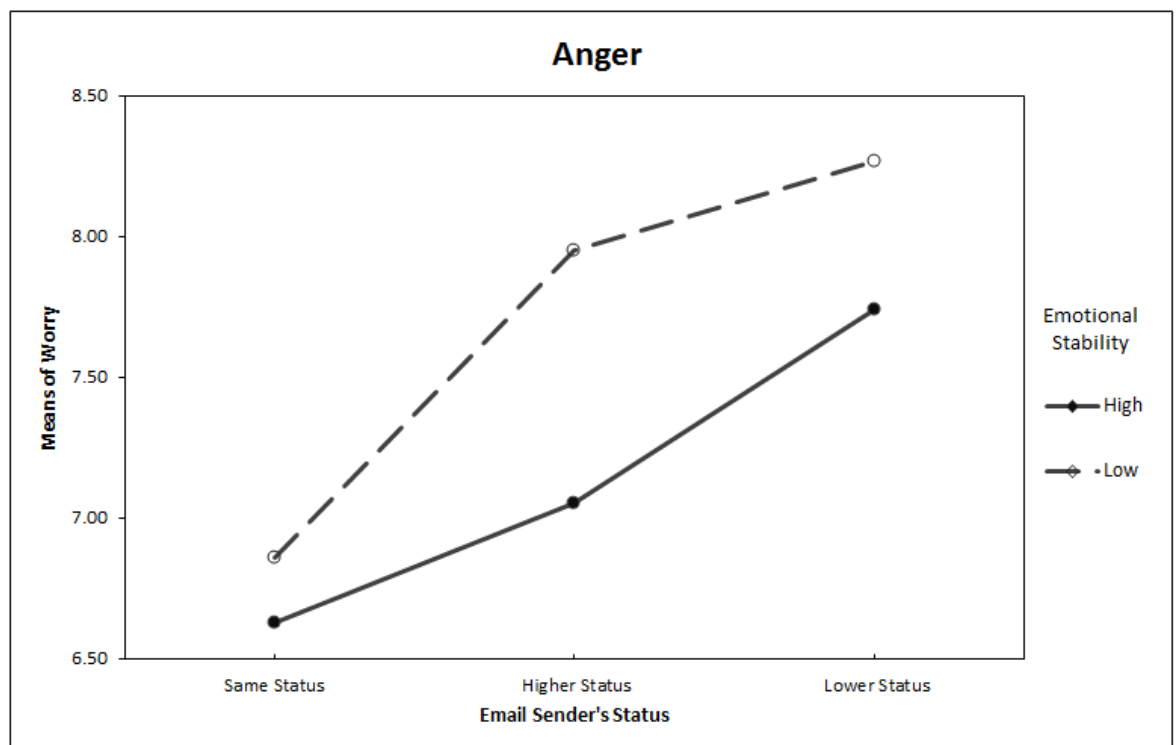


Figure 6.33: Interaction effect of sender status and emotional stability on anger

- *H22c: Behavioural reactions*

There was a significant interaction effect of emotional stability and sender's status on compliance  $F(1,740) = 5.72, p<.01$ , but not on move against or move away (Appendix I6). Hypothesis 22c was not supported, because participants did not show a less negative behavioural response when the

email recipient has higher scores in emotional stability and the sender is from the same status than the email recipient who has lower scores in emotional stability and the sender is from different status. Figure 6.34 shows that compliance is unaffected by sender status for participants with low emotional stability, who show moderate compliance towards the email sender, regardless of status. However, sender status influences compliance of those with high emotional stability, who comply more towards a higher status sender and least towards a lower status sender.

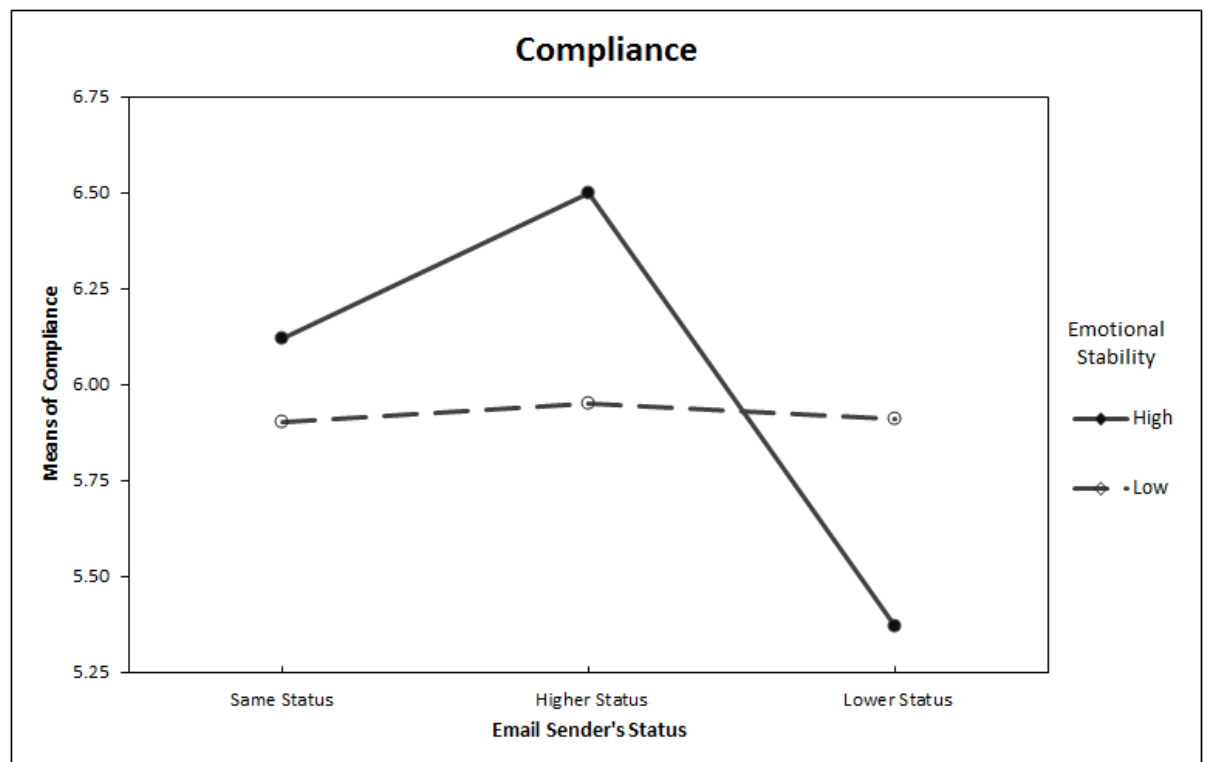


Figure 6.34: Interaction effect of sender status and emotional stability on compliance

#### ▪ Summary

The findings revealed that Hypothesis 22 was not supported for positive attributions and behavioural reactions. For affective responses, Hypothesis 22 was supported for anger but not for other affective responses.

#### 6.5.4.7 Summary of hypotheses 17–22

Figure 6.35 shows the interactions between recipient's characteristics and sender's status. The interaction between recipient's global identity and sender's status (Hypothesis 17) was only confirmed for anger, move against and move away tendencies, but was not supported for other outcome variables. The interaction between recipient's local identity and sender's status (Hypothesis 18) was not supported for all outcome variables. The interaction between recipient's dispositional trust and sender's status (Hypothesis 19) was confirmed for anger and sadness and



not supported for other variables. The interaction between recipient's organisational trust and sender's status (Hypothesis 20) was not supported. The interaction between recipient's extraversion and sender's status (Hypothesis 21) was confirmed for anger and sadness, but not supported for the other reactions. The interaction between recipient's emotional stability and sender's status (Hypothesis 22) was confirmed for anger, but was not supported for the other reactions.

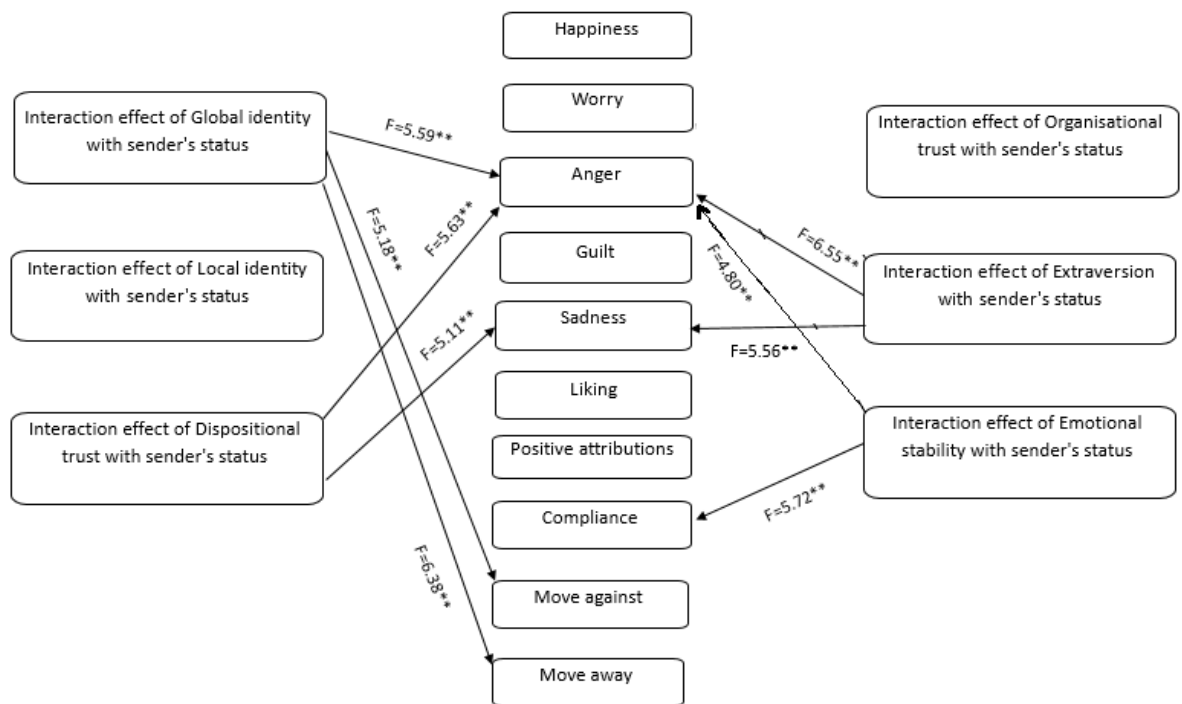


Figure 6.35: Interaction effects of the moderating factors with sender's status on the outcomes

## 6.6 Conclusion

The Study 2 model (Figure 2.4) was partially supported, with a high amount of support for the moderating effect of global identity and dispositional trust, and little support for the moderating effect of local identity and organisational trust. However, it was not supported for extraversion and emotional stability, suggesting no moderation effect of extraversion and emotional stability on the reactions to email norm violation (see Figure 6.36, Hypotheses 5-10). The email recipient's extraversion, emotional stability, dispositional trust, organisational trust, global identity and local identity did not interact with the email sender's culture (see Figure 6.36; Hypotheses 11- 16 were not supported). Figure 6.36 shows the summary of Hypotheses 17-22, indicating that the email recipient's extraversion, emotional stability, dispositional trust and global identity significantly interacted with the email sender's status (Hypotheses 17, 19, 21 and 22 had partial support). Participants had less negative reactions when the email recipient had a higher global identity,

dispositional trust, extraversion or emotional stability and the email sender was from the same status than when the email recipient who had a lower global identity, dispositional trust, extraversion or emotional stability and the sender was from different status. However, local identity and organisational trust did not react with sender's status (Hypotheses 18 and 20 were not supported).

Future research should therefore consider additional explicit information about the email sender's age, gender, position, country, ethnicity and religion, which may also affect the recipient's behavioural reaction towards the email. It should be noted that some of these factors may be more significant in some cultures than in others. Finally, cultural differences and complexities between individuals may make it harder to separate the influence of each cultural aspect. Therefore, controlling for other cultural factors which could affect the outcomes would give more pertinent results. A control group receiving a formal ideal email might also be recommended for future research. Extensive explanations, implications and limitations of the findings and recommendations for future research are addressed in the discussion and conclusion chapters.

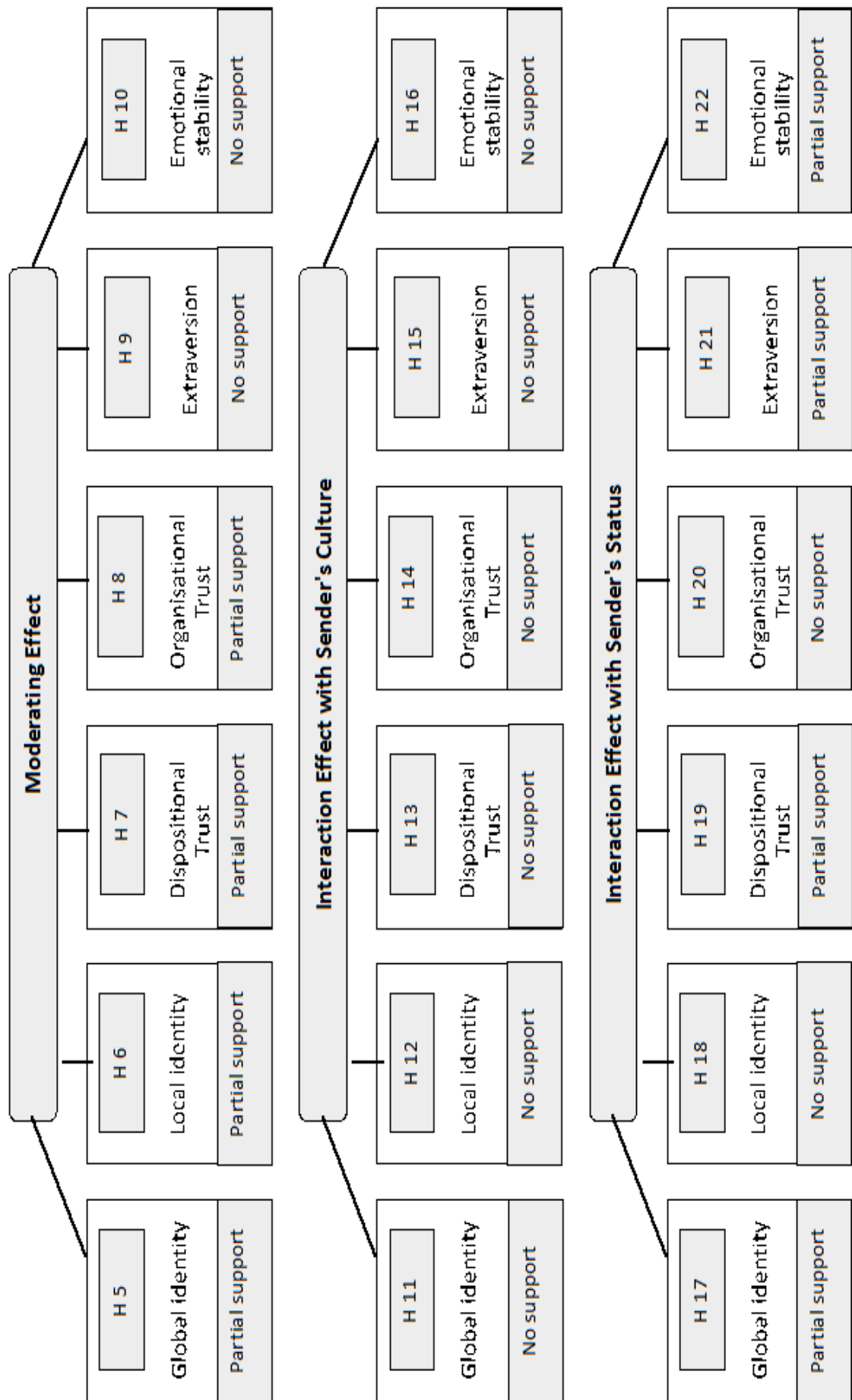


Figure 6.36: Hypotheses testing moderation and interaction effects of six moderating factors on the outcomes

## **7 Discussion of Study 1&2 Findings**

### **7.1 Introduction**

Although electronic media greatly facilitates communication between individuals within and across organisations (Minsky & Marin, 1999; Waldvogel, 2007), it also poses a continuing challenge for the many students, professionals and institutions from varying backgrounds who must communicate electronically (McGoldrick, 2011; Vignovic & Thompson, 2010). Features of electronic communication that differ from face-time and phone communication, such as a lack of visual/verbal social context, may lead people to react with a variety of emotions to electronic messages, which may influence how they respond to the email sender. However, the information provided about the email sender may also have a potential impact on the recipient's reactions.

In this thesis, two studies were conducted. The aim of Study 1 was to examine the moderating effect of culture and status of an email sender on the recipient's emotional and behavioural reactions to the email norm violation, after manipulating the social information about the email sender provided in an experimental email (e.g. some participants received the email from a sender of higher status/same culture, or of same status/same culture etc.). Study 1 was conducted in the HC and HE professional sectors of two culturally different countries, the UK and KSA. Study 2 examined new potential moderators including the email recipient's level of global identity, local identity, organisational and dispositional trust, and level of emotional stability and extraversion, time tested in one international business sample. This was the first cross-cultural research to investigate the effect of email sender's and recipient's work status and culture and other recipient's characteristics (global identity, trust, personality traits) on the reaction to email norm violation.

### **7.2 Response Rate**

The response rates in this study were below the recommended 80% or higher to be representative of the study population. Response rates were low, regardless of the type and format (online or paper-based) of survey administered in both the UK and KSA. The response rate in Saudi Arabia in Study 1 was 49% for the hard copy questionnaire (HE and HC), while it was even lower in the UK at 37% in for the online survey (HE and HC). However, the lowest response rate of 24% was for the international business sample in Study 2. One possible reason for the low response rate was the length of the questionnaire (which measured multiple constructs) and the complexity of the survey questions asking about emotional reactions and attributions (the incomplete questionnaires

indicated that many participants stopped at this stage of the questionnaire). Another reason is that the professions being researched (healthcare, higher education and global business) are inherently busy. Of the three professions, the higher education sector had the highest response rate. In addition, the researcher added some additional measures to the Study 2 questionnaire, which increased the length, complexity and completion time of this questionnaire, which may explain why Study 2 had the lowest response rate. Other studies suggest that low response rates are typical for hard copy questionnaires and online surveys, which yield a 20% response rate on average (Nulty, 2008). Response rates have been even lower in some published studies (e.g. James, Chen & Sheu, 2005 (10% RR); Link & Mokdad, 2005 (15% RR); Rodriguez et al., 2006 (18% RR); Shu, 2005 (10% RR)).

The low response rate suggests that caution is needed when generalizing results from this study to the target populations, as there is the potential problem of having an unrepresentative sample, which reduces the validity of inference. In addition, it was not possible to test for non-response bias, as the researcher did not collect information from the non-respondents to see if they differed significantly from the respondents in their characteristics or attitudes. As mentioned above, this problem is not limited to this study, but is a general problem within survey research (Sivo et al., 2006).

### **7.3 Findings on the Moderating Effect of Email Sender's Culture in Study 1 & 2**

**Hypothesis 1:** Participants would show a more negative affective response, make more negative attributions, and show a more negative behavioural response when the email sender is of the same culture, than when the email sender is of a different culture.

Participants perceived that there had been an email violation, regardless of the email sender's cultural background. This result is consistent with Vignovic and Thompson (2010), who also found a global perception of email violation in their study of students who perceived email violation in the experimental email, regardless of sender's cultural background (known/unknown). This confirms that the experimental email violation of content and technical errors was successful, as all participants recognised an email violation, regardless of whether the sender was of the same or different culture.

A same culture sender increased the negative effect of anger on the move against tendency in the UK sample (in-culture bias and out-culture favouritism), supporting hypothesis 1. This finding was

expected, and suggests that UK participants are more tolerant of email violation when the sender is of a different culture, and it also corroborates the finding of Vignovic and Thompson (2010), who found that US (Western) participants were more tolerant of email violation from a foreign sender. The UK sample reacted behaviourally with less tendency to move against when the sender was from a different culture than participants who received an email from the same culture. Thus, although their attributions were not influenced by sender's culture, they still respond more positively when the sender is from a different culture, as expected, which shows that the UK professionals have a high level of cultural competence, as they react with understanding when other cultures violate email norms. There is no previous study which explored these effects in the UK, therefore this is an original contribution to knowledge.

In contrast, a same culture sender reduced worry (in KSA HE) and increased guilt and positive attributions in the KSA HC sample. Moreover, a same culture sender increased the effect of happiness on compliance in the KSA HC sample (in-culture favouritism and out-culture bias), challenging hypothesis 1. In the KSA HC sample, the same cultural background of the sender had an impact on their attributions towards the sender. This finding suggests that the positive attributions and the behavioural reaction (i.e. compliance) of Saudi doctors and nurses are influenced by the cultural background of email senders: they react more positively towards people from their own culture than those from other cultures who violate communication norms. There is no previous finding within KSA to compare, therefore this finding is an original contribution to the literature.

Overall, the UK participants appear to be more forgiving of email violation by other cultures than KSA participants. This finding suggests that the culture of an email sender who violates email communication makes a difference in how the recipients in KSA react and respond, which is not a good thing, as it suggests they have low cultural competence (i.e. they have low cultural awareness, understanding, sensitivity and practice towards people communicating from other cultures; they do not react more positively towards foreign). The implication of this finding is that KSA professionals, particularly in HC, need to be more tolerant of different cultures making mistakes in their emails. Moreover, KSA professionals in HE and HC require cultural competence training to form more positive attributions and react more positively towards emails from other cultures. Saudi professionals in both HC and HE need to develop better email communication reactions to this group, even when they violation email norms, in order to maintain good supportive

relationship with this out-group, and teach them how to compose effective emails, to reduce non-positive reactions to email violations. In the HC and HE samples (of doctors and nurses, lecturers and students) in both countries, there were no differences in participants' happiness, anger, sadness, liking or the move away tendency towards a sender of same or different culture.

The sender's culture had no influence on how they reacted emotionally and behaviourally within the multicultural international business sample. Consequently, the email violation from a sender of a different culture did not affect these recipients more positively than email violation from their own culture and they did not respond to the email any differently. The average scores for their behavioural reactions towards email violation show that they were most likely to move against the email sender, of both same culture and different culture, followed by the tendency to move away from both same/different culture sender, and they were least likely to comply. The implication of this finding is that international business people negatively respond to email violations, regardless of the culture of email sender. This is not a good signal, especially as the level of move against is high. This shows a real need for effective email communication training in the business world, as well as cultural competence training, to reduce the tendency to move against and move away, and increase compliance. Across all samples, there was no significant moderating effect of the sender's culture on affective responses of happiness, sadness, and liking, and the behavioural reaction of moving away from the email sender. This means that all groups reacted towards the email sender from the same or a different cultural background with no differences in happiness, sadness, liking and the move away tendency. Therefore, Hypothesis 1 only had partial support.

The confirmation of Hypothesis 1 within the UK sample could be because these groups are more exposed to different cultures and have more experience of communication with others than their counterparts in KSA. Because of living and working in multicultural environments, native individuals may excuse others from foreign cultural backgrounds when writing informal emails, but individuals from the same culture are not treated as leniently as they expect more from them. Besides familiarity, differences in cultural norms between the two countries may play a crucial role. The findings indicate significant differences between UK and KSA in cultural identity, collectivism and power distance. UK participants might also have different expectations about the difficulty of learning the technical aspects of a language, by individuals from a foreign culture compared to individuals from the same culture, who are not to be excused (Vignovic & Thompson, 2010), hence they react more negatively to cultural in-group email violation.

The findings indicated that the appraisal (Intergroup emotions theory (IET) by Mackie et al., 2000) of the sender's culture influenced the relationships between violation perception and affective and behavioural reactions. Within the UK sample only, when the in-group/same culture and out-group/different culture violated communication norms, appraisals made group members more prepared to report a negative intentional behaviour (i.e. the move against tendency) with the in-group/same culture members. In contrast, the KSA HC sample had more positive attributions and a more positive behaviour (i.e. compliance) to a sender of the same culture as the recipient, which is consistent with the social identity theory.

The findings of the moderating effect of sender's culture fail to endorse the significant role of social identification for intergroup processes, proposed by Tajfel and Turner (1979), for example the UK sample had less tendency to move against out-group, which contradicts social identity theories, and the social identity had limited support (in positive attributions and compliance) within the KSA HC sample only. According to social identity theory, both the UK and KSA samples should have reacted more negatively towards the out-group/foreign sender, and more positively towards the in-group/same culture sender, to be consistent with social identity theory; however, this was not supported in either the more individualistic or more collectivist culture. There was no support for these group identity processes in either the HE or HC professional sector.

A possible explanation for why the present study findings contradict social identity theory is that social identity processes do not apply when evaluating effects of culture at such a broad level (i.e. same or different), as cultural background is unlike status, wherein high/same/low status applies globally (that is people worldwide tend to value higher status over same and lower status); when it comes to culture, people have different perceptions and reactions towards different cultures and indeed their own, not just same/different culture. Nuanced perceptions of cultures provide specific cultural information about email senders that could change their reaction in the experiment. For example, in the Middle East (where the researcher is from), people have different reactions to quite similar cultures (e.g. Saudis generally see other GCC nationals as an in-group, while they might perceive Egyptians and Algerians as an out-group). Perhaps the same/different cultural background dichotomy is too broad in the present study, which could be addressed in future research. The vagueness of the description 'other culture' probably had less impact on the recipients of emails than if more specific cultural identifications had been specifically mentioned. This may have weakened the impact of the in-group versus out-group distinction.



The researcher designed the cultural background variable (same/different) based on the original research of Vignovic and Thompson (2010), which also operationalised cultural background very broadly as 'known/unknown', and also found a global out-group favouritism. Because the recipient does not know the particular culture they receive the violation from, they are restricted in their cognitive appraisal (Intergroup emotions theory (IET) by Mackie et al., 2000) processes; this relates to the concept that everyone outside one's in-group is one large homogenous out-group, which is not reflected in real qualitative differences between cultures. In addition, what factors categorise a particular culture as in-group or out-group to one's in-group is changing over time in response to historical and political events and processes. Culture is much more complex than a black and white in-group/out-group dichotomy could ever represent. Moreover, in real-world email communication, the sender is likely to provide more information describing their particular out-group culture, and would not simply inform the email recipient that they have received an email from a sender who is of a different culture. The validity of this new hypothesis could be tested in future research, by presenting participants with more specific cultural background information on the email sender, to see if that produces a different pattern of responses more consistent with intergroup processes conceptualised in social identity theory. A final point here is that social identity theory was developed by social psychologists, and psychology theories continue to be heavily criticised for not considering the broader social/historical/cultural context of factors that influence individuals' perceptions, cognitive appraisal and emotional and behavioural reactions. Another related argument is that psychology tends to develop universal laws that explain human cognition and behaviour, regardless of historical and social context, and which can be too simplistic when applied to complex human interactions, such as cross-cultural email communication.

The findings from this study show the impact of the contextual salience of similarities and differences of culture and participants' cultural backgrounds on the development of group-based emotions, attributions and behaviours. When the email sender's culture was made salient, the UK participants perceiving a norm violation showed out-group/different culture favouritism and in-group/same culture bias. This was expected, and supports Vignovic and Thompson (2010), who also found a favourable bias perception towards a sender of unknown culture, and a more negative bias towards perception of a sender of the same culture. Their US sample were more tolerant of a foreign sender violating technical language errors in email communication, and were less tolerant of same behaviour from the same culture.

Vignovic and Thompson (2010) argued that US participants (more individualistic culture) expect more from their in-group, whereas in collectivistic cultures such as KSA higher collectivist orientation results in expecting the more from other cultures than from their in-group. Our findings may be explained by the black sheep effect as individuals expect from in-group members to know more about the group norms. Marques et al. (2001) found that norm violations by in-group members can be perceived more negatively (e.g. the black sheep syndrome) than those by out-group members. The black sheep effect is when in-group members act in a dislikeable way (relative to group norms/expectations), and they are evaluated more negatively than dislikeable out-group members (Wang et al., 2009). As a consequence of interaction between groups, positive emotions towards the out-group can be increased while negative emotions can be reduced (Christ et al., 2006; Miller et al., 2004). In this study, therefore, this may explain why there were more negative emotions towards email sender from the same culture but less negative emotions towards sender from a different culture (i.e. black sheep effect).

The study also supports the findings of previous studies indicating that providing social information about the email sender may enhance positive perceptions and understanding amongst employees, helping develop their relationship and reduce group effects (Axtell et al., 2012). Vignovic and Thompson (2010) found that including information about an email sender's culture diminishes negative perceptions about an email sender who violates email communication being incompetent, untrustworthy or dislikeable etc. Therefore, situational information about remote collaborative partners may reduce dispositional influence (Cramton et al., 2007). Cramton et al. (2007) suggest that failure of collaboration amongst distributed teams can be resolved by providing situational information during communication with each other, as this tends to enhance understanding and correct attributions. Intergroup relations are clearly sensitive to factors such as cultural similarities or differences. Social information provided about the email sender's can make influential differences to how individuals react to email communication. The present study led to a better understanding of the way collaborative individuals and organisations could stimulate social consistency by making the cultural background of the sender explicit, which provides the recipient with more specific information to appraise (Intergroup emotions theory (IET) by Mackie et al., 2000) and explain possible reasons for the violation, which then influence their affective and behavioural reactions. Future research should investigate the effect of group culture from different cultural perspectives.

The experience of guilt towards the sender who was from the same culture within the KSA sample may be due to in-group (same culture) favouritism, as highlighted by Costarelli (2005), who found that when an intergroup norm is made salient, individuals who stated more in-group favouritism showed high possibility of increased self-directed negative emotions (felt more guilty and disappointed with themselves). Moreover, Gordijn et al. (2006) also found that low identifiers had more anger and guilt when in-group members violated norms. They found that more anger and guilt mediated the negative behavioural action tendencies. Furthermore, Eid and Diener (2001) suggested that the importance of self-conscious emotions that may arise due to violating social norms such as guilt (prevention-focused) is amplified in more collectivist cultures (such as that of KSA).

#### **7.4 Findings on the Moderating Effect of Email Sender's Status in Study 1 & 2**

**Hypothesis 2:** Participants would show a more negative affective response, make more negative attributions, and show a more negative behavioural response when the email sender has a different status to the recipient, than when the sender has the same status as the recipient.

Hypothesis 2 (moderating effect of sender's status) was partially supported for guilt and the move against tendency in UK sample (precisely in HC). Same-status sender reduced the effect of violation perception on the affective response of guilt and the effect of anger and the move against tendency (same-status preference and a higher-status bias). Hypothesis 2 was also partially supported for sadness in KSA sample (precisely in HE). Same-status sender reduced the effect of violation perception on the affective response of sadness only (same-status preference and a lower-status bias). The moderating effect of sender's status on the relationship between affective responses (anger and guilt) and the move against tendency within KSA HE opposed hypothesis 2, indicating that higher status reduced the negative reaction of moving against the sender (higher-status favouritism), but lower status increased this negative reaction (lower-status bias). Finally, the international business sample showed a positive moderating effect for work status, increasing the affective response of anger towards a sender of higher status.

In sum, the findings showed stronger negative reactions towards a sender of lower status within KSA HE, but there was no lower status bias impact found in the UK or KSA HC samples. However, stronger negative reactions were found towards a sender of higher status within the UK HC sample, but there was no higher status bias impact found in the KSA or UK HE samples. There

was no moderating effect of sender's status on compliance across all samples, indicating that groups' reaction of compliance did not vary based on the email sender's status. Moreover, the KSA HC and UK HE samples showed no influence from the email sender's status, indicating that the email from the same-, higher- or lower-status sender did not affect their perceptions of violation, affective reactions or behavioural reactions. Therefore, Hypothesis 2 only had partial support.

The findings therefore indicate that the effect of the sender's status may depend on the recipient's cultural background, country and work sector. A lower status sender may be more vulnerable in a high power distance culture (e.g. KSA HE), which can result in a lower status person becoming a target for negative reactions by high status or more powerful individuals. In contrast, the same-status sender may be perceived more favourably by both UK and KSA recipients. Although the findings regarding the moderating effects of the sender's status were limited, they do indicate that the sender's status does have an influence on the reactions to email norm violation, generally indicating a lower status bias within the KSA (particularly in HE), and a higher status bias within the UK (especially in HC).

The findings present interesting evidence that having (and proclaiming) the same work status as an email recipient can assist as a protective element against negative behavioural reactions (i.e. move against or move away from the sender), as this study found that having/showing a lower status makes individuals more vulnerable to be treated more negatively (less respectfully and less equally) in email communication (in KSA HE). This may indicate a lower-status bias within KSA and KSA HE samples. This suggests that participants had higher expectations of writing quality from lower-status individuals, while poor writing quality is viewed as more acceptable from individuals of the same or higher status. In contrast, revealing a higher status makes individuals more vulnerable to be treated more negatively in email communication (in UK HC). This may indicate a higher-status bias within the UK HC sample. Lower status participants (i.e. nurses) may have higher expectations of writing quality from higher-status sender (i.e. doctors), while a poorly written email may be more acceptable from individuals of the same or lower status. Therefore, people of lower status (in KSA HE) or higher status (in UK HC) are particular groups that need to be trained in how to compose professional emails with sufficient courtesy and assertiveness to receive positive reactions.

The findings of a lower-status bias found in KSA HE but not in the UK sample may be due to the significant hierarchical differences between higher status and lower status individuals in the KSA

particularly between lecturers and students in compared to the status differences between doctors and nurses, with lecturers expecting more from students in terms of formality of correspondence. The higher education sector is particularly very hierarchical and dominated by the culture of power distance. It is possible that doctors and nurses perceive each other as being more involved in collaborative work activities than is the case with lecturers and students. Status differences might also be less pronounced in the KSA HC settings because of the age difference between doctors and nurses is generally less than that between lecturers and students. However, the findings of a higher-status bias emerged within the UK HC sample but not in the UK HE may also be due to the differences in the expectations from higher status senders (i.e. doctors). UK nurses may expect more from the doctors in terms of email formality but students may not have such expectations from the lecturers. Cultural differences between KSA and UK (such as power distance) might have caused the differences in the participants' reactions to norms violated by the same/higher/lower status of the email sender.

The findings provide mixed support for Hypothesis 2, suggesting more than merely an in-group/out-group effect (in-group protection and out-group bias). Affective and behavioural reactions may relate to status (lower status or higher status bias) as well as group identity. The findings are consistent with the appraisal (Intergroup emotions theory (IET) by Mackie et al., 2000) theories developing group-based emotions. An appraisal of the in-group/same status increased the experience of negative emotions toward an opponent group/lower status in the KSA HE or higher status in the UK HC samples. In-group/same status encourages specific emotional reactions. The appraisals of the email sender's status can influence intergroup behaviours under such conditions. The findings show that intergroup behaviours differ following the manipulations of group-relevant status. The present study indicates the essential role of social identity in appraising certain behaviours by individuals. The same status seems to protect individuals against severe behavioural reactions. At the same time, individuals are more likely to move against perceived violations from the email sent from lower status (in KSA) or higher status (in UK) individuals.

The findings reveal the influence of the contextual salience of similarities and differences of status on the development of group-based reactions. When the email sender's status was made salient, participants experiencing a norm violation showed in-group/same status favouritism and the out-group/lower or higher status bias. According to intergroup emotions theory (Mackie et al., 2000), the findings indicated that the appraisal of the sender's status moderated the relationships between

norm violations and affective and behavioural reactions (action tendencies). Our findings endorse the significant role of social identification for intergroup reactions proposed by social identity theory. When the in-group/same status and out-group/lower or higher status violated communication norms, appraisals made group members more prepared to report negative emotions (i.e. guilt and sadness) and negative intentional behaviours (i.e. the move against tendency) with the out-group/lower or higher status members. Considering the similarities to (or differences from) the email sender's group regarding status engendered different emotional and behavioural responses to the email presented to the participants. Individuals' social identities that linked them to the email sender's group made them appraise the situation in a different manner, generating certain reactions. The findings indicate that writing an informal email is inappropriate when communicating with a higher/lower status.

The results indicate that electronic communication can be affected by the social context, which includes geographical, organisational and situational factors, such as the relationships between email senders and recipients and social norms, pertaining to what should be communicated and to whom (Sproull & Kiesler, 1986). The finding of greater tendency to discriminate against out-groups is consistent with previous research (Mullen et al., 1992; Reichl, 1997). The findings for affective responses reflect previous research findings for emotional reactions to harmful out-group behaviour, such as studies (Intergroup emotions theory) by Mackie et al. (2000), Gordijn et al. (2006) and Stephens et al. (2009). The findings also correspond with McGoldrick's (2011) finding that out-group bias leads students and lecturers to move against each other.

There were differences in the reactions of recipients of high and low status within the UK but not within the KSA when controlling for participant age. High-status participants reacted more strongly than lower-status participants in the UK HE, whereas lower-status individuals in the UK HC reacted more strongly than high-status individuals. The results from this study suggest that professionals have a preference for more formal and polite email communication, as every participant in this study, from all three professional sectors, and two very different countries culturally, reported that the email was a violation of their email communication norms, which suggests there are some global standards for composing an appropriate email in business, HE and HC. These 'standards' may need to be taught to people within organisations, as it is assumed that people can write a competent, professional email that will be complied with respectfully, yet we know that many

people have become careless in their online communication, as informality is the dominant tone in most instant messaging and social media, which may transfer to email.

### **7.5 Findings on the Interaction of Email Sender's Culture and Status**

**Hypothesis 3:** Participants would make more negative attributions (H3a), show a more negative affective response (H3b), and show a more negative behavioural reaction (H3c), when the sender has a different status and the same culture than when the sender has the same status and different culture.

The analyses revealed that the UK HE sample showed only one interaction effect, with recipients reacting with more positive attributions towards a sender of the different culture but same status, as compared with the same culture, but lower status, suggesting that status had more influence on these reactions, as they preferred an out-group (other culture) member of same status over an in-group (same culture) member of lower status. Moreover, the KSA HE sample showed a significant interaction effect, with recipients reacting with more positive attributions towards a sender from a different culture but same status, as compared with a sender from same culture, hence status again was more important than culture, as they preferred out-group culture when they were of the same status than in-group culture of lower status.

In addition, the UK-HC sample showed a significant interaction effect, reacting with more guilt towards a sender from the same culture but higher status, as compared with a sender from a different culture of the same status (where there was less guilt), hence they felt guilty when their in-group (culture) superiors violated norms. This finding suggests that nurses in the UK would feel more guilt if doctors of the same culture violate email norms, whereas an email from a foreign peer would reduce their guilt reaction. The findings also exposed that the UK participants significantly incline to 'move against' the sender when the sender was of the same culture and different (higher) status compared with when the sender was of a different culture and the same status.

Furthermore, the KSA HC sample showed no significant interaction effect, suggesting that how doctors and nurses in KSA perceive and react to an email violation is similar, regardless of the sender/receiver culture or status. One possible explanation for this finding is that the KSA HC organisational culture may be more tolerant of culture and status differences, since their workplace is a multicultural environment, and doctors and nurses in KSA do not appear to judge one another

based on their professional status group, as it did not influence their attributions, affective reactions, liking or intended email response.

There was no interaction effect of sender's status and sender's culture on affective responses (happiness, worry, anger, sadness, and liking), and behavioural reactions (compliance and move away). The interaction hypothesis in Study 1 was only supported for positive attributions, guilt and the move against tendency. The recipients' reactions (i.e. positive attributions, guilt and the move against tendency) in Study 1 varied according to the interaction of sender's status and culture. The other reactions in Study 1 did not vary according to the interaction of sender's status and culture indicating that the sender's status and culture may cancel the effect of each other.

The international business sample produced significant interaction effects, as culture influenced violation perception differently depending on the status of the sender. When the sender was from the same culture, but different status, participants reacted with more worry, sadness, and anger. The effect of status level differed depending on the culture of the sender. For example, they were more favourable to a sender from a different culture with the same status than a sender from a different culture with higher status, but they most preferred a sender from the same culture with higher status, and when the sender was of lower status they liked them less regardless of their culture.

Regarding behavioural reactions, when the sender was of higher status, the recipient was more likely to move away from them if they were from a different culture. When a sender had the same or lower status, the recipient was more likely to move away from them if they were from the same culture. The overall trend is that international business people are more likely to move away from a foreign sender of higher status. According to the intergroup emotions theory (IET) by Mackie et al. (2000), individuals in weaker positions are more likely to move away than move against norm violators, which may explain why participants from international business (in a weaker position) tended to move away from the higher status sender (in a stronger position), but not to move against them. Because the majority of the international business sample were Eastern, this finding may indicate that Eastern individuals had more concern about higher status from the same culture, but may be willing to avoid higher status from other cultures, and move away from them as same-culture managers would have more power than foreign managers would. However, there was no interaction effect of sender's status and culture on some affective responses (happiness, guilt, and liking), positive attributions, and the behavioural reactions of compliance and the move against



tendency, indicating that the interaction of sender's status and culture did not influence these reactions within the business sample. Therefore, Hypothesis 3 was partially supported within the international business sample.

These significant findings suggest that the effect of being higher status was enhanced by the effect of being from the same culture. The effect of the same culture bias might be promoted by the effect of higher status, with participants experiencing more affective and behavioural reactions for members of the same culture with higher status. This finding suggests that the negative effect of being from lower status is weakened by the effect of being from the same culture. The effect of different culture preference might be promoted by the effect of an in-group preference related to status (i.e. same status). When the email sender's status and culture were made salient, participants experiencing a norm violation showed same status/different culture favouritism and higher status/same culture bias. According to intergroup emotions theory (Mackie et al., 2000), the findings indicated that the appraisal of the sender's status and culture generate negative emotions, behavioural reactions and attributions. The significant findings endorse the important role of social identification for intergroup emotions, attributions and behaviours proposed by social identity theories. When the same status/different culture and higher status/same culture violated communication norms, appraisals made group members more prepared to report negative emotions and negative intentional behaviours with the higher status/same culture members.

## **7.6 Findings on the Email Receiver's High/Low Collectivism and Power Distance**

**Hypothesis 4:** Higher collectivism and higher power-distance (KSA) participants would react more strongly in terms of affective responses, attributions, and behavioural reactions, than lower collectivism and lower power-distance (UK) participants.

There was a different pattern of significant results within each sector, with few significant effects of high/low collectivism in HC and HE, and many in international business. Across all three sectors, most results indicate that high collectivism influenced recipients to have stronger affective responses and to report only a negative behavioural reaction of moving against the sender.

The reactions of the high collectivist culture were strong, in both positive and negative directions. In the Study 1 (HE and HC), the high collectivism group reported more happiness, more anger, hence stronger affective reactions, than low collectivism group, and reported more tendency to move against than the low collectivism group, but there were no group differences in violation perception,

attributions and other affective and behavioural reactions. These findings from HE and HC suggest that highly collectivist recipients have a strong tendency to move against the email sender. Furthermore, in the international business sample, the high collectivism group reported more happiness, worry and sadness, and hence quite strong affective reactions. The high collectivism group also had more positive attributions towards the sender than the low collectivism group, but no group difference in behavioural reactions. Surprisingly, the low collectivism group was more likely to perceive norm violation than the high collectivism group.

Few high/low power distance differences were found in the HE and HC sectors. Differences were noted in both affective reactions and negative behavioural reactions within the Study 1 sample, however the international business sector (Study 2) showed many effects. In the Study 1 sample the high power distance group reported more happiness and anger, with no group difference in violation perception, attributions or liking, but they had a stronger tendency to move against the sender than the low power distance group. Furthermore, in the international business sample the high power distance group reported more violation perception, worry, sadness and stronger tendency to move against and move away than the low power distance group. In contrast, the lower power distance group had more liking, more positive attributions and more compliance. The findings show that the tendency to move away/against is higher in the international business sample than in HC or HE, so they have stronger behavioural reactions in both the high and low power distance groups.

The international business higher power distance culture would move away or against the sender, because business people may expect communication to be professional, and have a higher standard of this expectation to some degree. Hypothesis 4 had partial support for collectivism and power distance in Study 1. Unexpectedly, the high-power-distance group reported more negative reactions and the low-power-distance group reported more positive reactions in Study 2, which may indicate the complexity of the effect of such factors in relation to the work sector.

The difference between participants' reactions from the two countries (UK and KSA) was more significant than the difference between high/low-collectivism and power-distance cultures. The comparison between KSA and UK showed that KSA participants reacted more negatively than the UK participants who, by contrast, reacted more positively. The difference between the results of culture comparison and country comparison emphasise the distinction in reactions between *culture* and *country*. To conclude, although collectivism and power distance affected the reactions to email

norm violation, there may have been additional cultural variations between participants which contributed to influencing their reactions (i.e. in terms of the cultural variations discussed at length in the introductory chapter of this thesis).

The significant findings may indicate that emails are likely to be written as direct and short messages in a low collectivist cultures, with more positive attitudes towards communicating online than in highly collectivist cultures (Fujimoto et al., 2007). Therefore, intercultural communication between high/low collectivism and power distance can be improved by understanding the cultural context of both cultures. The findings endorse the significant role of cultural backgrounds for enhancing emotions, attributions and behaviours. When communication norms were violated, appraisals made higher collectivism and higher power distance members more prepared to report stronger emotions and intentional behaviours.

The findings indicate that cultural norms may influence attitudes, emotions, behaviours and beliefs of what is suitable in a particular condition (Moser & Axtell, 2013). The differences between high and low collectivism, and high and low power distance, can be related to cultural norms. The length of the message can be seen either as a positive emotional cue or as a negative emotional cue by different people (Cheshin et al., 2011). Regarding the amount of information needed for communication in different cultures, Hall (1976) distinguished between high- and low-context cultures in this regard (Pflug, 2011). The results are consistent with Frijda and Mesquita (1995), who found that three features of emotion are influenced by culture: the expression of emotions, the experience of different emotions, and the social effects of emotions. Bjørge (2007) also found that emails written by students from high power-distance cultures are more likely to include a formal greeting, whereas emails written by students from low power-distance cultures are less formal. Cultural differences influence the manner in which emails are written and perceived. The present study also supports the conclusion of the study of Waldvogel (2007) that messages including suitable greetings and closings affect relationships in the workplace and reflect organisational culture. Therefore, cultural differences should be considered before deciding on the greeting and closing language used in the email (Waldvogel, 2007). Taras, Steel and Kirkman (2010) argued that cultural values (e.g. individualism and collectivism, power distance) are predictors of emotions, thus people should be more formal and avoid norm violation when communicating via email within people from more collectivistic cultures, because they may have stronger emotional responses, which may also lead to non-compliance, confronting or ignoring the message sender.

## 7.7 Discussion of Additional Hypotheses Findings in Study 2

### 7.7.1 Direct effects of global/local identity, dispositional/ organisational trust and extraversion/ emotional stability

This section discusses the findings of hypotheses 5-10 (Table 7.1) about differences between high/low scores on each moderator variable (i.e. global and local identities; dispositional and organisational trust; extraversion and emotional stability) in the international business sample.

*Table 7.1: Hypothetical differences between high/low scores on each moderator variable*

	Moderating variables	Direct effect of the variables
1	Global identity	Hypothesis 5
2	Local identity	Hypothesis 6
3	Dispositional trust	Hypothesis 7
4	Organisational trust	Hypothesis 8
5	Extraversion	Hypothesis 9
6	Emotional stability	Hypothesis 10

#### ▪ *Global and local identity*

The results of regression and independent samples t-tests showed that high global identity scores had positive effects on outcomes, including lower violation perception, higher happiness and positive attributions of the sender, with more compliance. The findings also indicated that global identity moderated the relationship between violation perception and only three outcome variables (happiness, liking and positive attributions). It also moderated the effect of anger on the move away tendency. Hypothesis 5 was partially supported, thus high global identity may be a protective factor against reacting and responding negatively to the inevitable email violation that may occur in international business. High local identity had the opposite effects but with less magnitude, suggesting that this is not a good outlook for dealing with email violation effectively. The higher local identity group had more worry and sadness than the lower local identity group. High local identity also reduced positive attributions, compliance with the sender. Therefore, Hypothesis 6 was also partially supported. The findings indicate a limited effect of recipient's local identity on the reactions to email violation compared with the effect of the recipient's global identity.

These results support the idea that global identity and local identity are separate constructs, as they had differential moderating effects on the level of perceived violation, and on some of the affective responses, and positive attributions made, as well as some behavioural responses. In general, higher global identity and lower local identity tend to have more positive effects on how international business professionals respond to an email violation at work. Our empirical findings support that individuals are less likely to negatively react emotionally and behaviourally to an email

message when they have high global identity or low local identity. The findings highlight the relationship between global identity and the reactions to email communication by suggesting that individuals with a high belonging to the global identity have less negative reactions to norm violation in email communication than individuals who have a low sense of global identity within multicultural virtual teams.

The findings indicate that global identity and local/national identity are distinct constructs which differed in their relationship to affective and behavioural reactions for multicultural virtual teams. Our findings further suggest that high global identity individuals in multicultural virtual teams are likely to develop less negative reactions to norm violation in email, while in contrast high local identity individuals tend to develop more negative reactions to norm violations in email contact. Reciprocally, a strong global identity facilitates the adoption of email communication which are adaptive to the multicultural team context and international businesses, which is an important finding theoretically and has practical implications.

Hypotheses 5 and 6 were partially supported by the empirical findings, which show that participants of different levels of global/local identity have different levels of emotional and behavioural reactions in multicultural teams. In contrast, the different levels of affective and behavioural reactions reflect the diverse global/local identities of participants from different cultures. This finding is one of the scarce experimental findings supporting the existence of a mutual global culture (i.e. high global identity) beyond the national level (Erez & Gati, 2004; Shokef & Erez, 2006, 2008). These findings corroborate the social identity conceptual framework proposing that individuals may have various identities (Tajfel & Turner, 1979), and that they may initiate whatever identity is appropriate to a specific situation (Brewer & Gardner, 1996), in this case their global and local identity. The findings are consistent with the findings of Shokef and Erez (2006, 2008) indicating that global identity may enhance the acceptance of cultural diversity, which may in turn facilitate trust, collaboration and belonging. They also support the findings of Glikson and Erez (2013) revealing a moderation effect of global identity on the display of positive emotions. The findings are also in line with the suggestion of Fitzsimmons (2013), concluding that cultural ideology moderates relationships among multi-cultural identity patterns and outcomes.

- *Dispositional and organisational trust*

High dispositional and organisational trust had positive effects. The high dispositional trust group reported less violation perception, more happiness, positive attributions, liking and compliance, and

less tendency to move against the sender than the low dispositional trust group. Moderation analysis showed that dispositional trust influences anger, sadness, liking and positive attributions, and also influences the behavioural reactions (i.e. move against and move away). Dispositional trust affects most but not all of the outcome variables (increases positive reactions and reduces the negative reactions). Therefore, Hypothesis 7 was partially supported. Higher organisational trust individuals experienced more happiness and were more likely to comply with the email sender's request than individuals with low organisational trust. Organisational trust also moderates the affective responses (happiness, anger and sadness), positive attributions, and the move away tendency only. Hypothesis 8 was also partially supported. Hence, the results of the effects of dispositional/organisational trust suggest that dispositional trust has more impact on the behavioural outcomes than organisational trust. Therefore, it is important to consider the differential impact of both of these types of trust on how international business people react to an email violation at work.

The findings indicate that dispositional and organisational trust moderate the relationship between norm violation perception and affective responses and between affective responses and behavioural reactions. Individuals with high trust tend to show negative reactions. Low trust individuals are inclined to show more negative reactions. Lower levels of trust decrease the likelihood to comply with the sender's request. The correlational analyses evidenced a negative association of dispositional and organisational trust with all negative affective and behavioural reactions. The results suggest that email recipients who are higher in dispositional/organisational trust felt more happiness and liking, less tendency to move against. When people are more willing to make themselves vulnerable to others and to trust them (Mayer et al., 1995), they have more positive affective responses and reactions.

The significant finding provides some credibility to comments made by researchers who suggested that trust is related to vital workplace behavioural outcomes. As dispositional trust had a large influence on the study outcomes, trust in the medium of email communication is influenced by the user's propensity to trust. While much existing research emphasised the significance of trust ensuring a virtual team's success and performance, this research suggests that organisational and dispositional trust are essential for predicting and moderating the emotional and behavioural reactions of the individual and team members.

The significant findings are consistent with Rotter's (1980) suggestion that people with a high trust propensity would behave more trustworthily and perform in a willing and moral way across circumstances. They also support that trust propensity is linked to high honesty, compliance and help offering (Rotter, 1971, 1980). The results also support that propensity to trust has been shown to be an important factor in Internet shopping (Cheung et al., 2001; Lee & Turban, 2001). The significant findings are also consistent with the results of Ashleigh and Higgs (2012), concluding that there was an association between propensity to trust with both SWB and psychological well-being, supporting the conclusion of a previous meta-analysis by Colquitt et al. (2007) which indicated that trust propensity explained incremental variance in behavioural outcomes.

The significant findings also support the notion that trust is an important factor for successful partnership and effective performance, as it often fosters enhanced cooperation (Mayer et al., 1995). The significant findings are consistent with Paul and McDaniel (2004), indicating a positive correlation between trust and performance produces a strong support for a relationship between trust and virtual collaborative relationship performance. The significant findings support the study of Jarvenpaa et al. (2004), indicating the moderation effect of trust between team communication and the outcomes. Trust is expected to be vital, because collaboration can be effective only if both collaborative teams of individuals trust each other (Jarvenpaa et al., 2004). Colquitt et al. (2007) found that trust is a predictor of risk-taking and related outcomes such as knowledge sharing, collaboration, communication and performance. They also support the conclusion by Dietz et al. (2010) and Kramer (2010), suggesting that trust becomes even more important in intercultural interaction. They are also consistent with the findings of Panteli and Tucker (2009), Sarker et al. (2011) and Menges et al. (2011) in indicating that trust has a moderating effect on attitudes and performance. They support Sharma's (2008) finding of a moderating role of trust in the e-tailer and value of the exchange outcome in the relationship between dogmatism and the tendency of consumption.

- *Extraversion and emotional stability*

People with high extraversion scores reacted with less sadness and more compliance than people with low extraversion. The reduction in negative reactions in highly extraverted participants makes sense, as trait extraversion measures 'positive emotions/affect' such as cheerfulness, being optimistic and good-natured. This may also explain why they complied more with an email violation, as it did not affect them so negatively. There were no significant differences between participants

with high and low extraversion in all other affective, behavioural reactions and attributions. This indicates that individuals with high or low extraversion reacted to the email message in a similar way, apart from sadness and compliance, which may show the limitation of the extraversion effect on the reaction to the email message. However, moderation analysis did not show any potential moderating effect of extraversion, thus Hypothesis 9 was not supported. There were no significant differences between individuals with high and low emotional stability. Hypothesis 10 was not supported, indicating that individuals with high emotional stability and others with low emotional stability had similar reactions towards the email sender. People with high emotional instability did not react with more negative affective or behavioural reactions than those with low emotional instability.

Individuals with higher extraversion may be more tolerant of norm violation of email communication, and form positive expectations toward the email sender, hence they react with less negative emotions and behaviours towards the sender. In contrast, individuals with higher introversion may react more negatively, which is a potentially unhelpful response in a global business context, where they may be frequently exposed to unintentional email violations. Moderation analysis did not show any significant effect of the recipient's level of extraversion or emotional stability on the affective or behavioural reactions to email norm violation. The outcome variables were not reduced or increased by the level of extraversion or emotional stability. Unexpectedly, the presented results did not emphasize the importance of these two personality traits (i.e. extraversion and emotional stability) for norm violation in email communication. More investigation by future research applying different methods/scales should be conducted.

#### **7.7.2 Interaction effects of global/local identity, dispositional/ organisational trust and extraversion/ emotional stability with email sender's culture**

This section discusses the findings of hypotheses 11-16 (Table 7.2) regarding the interactions between each moderator variable (i.e. global and local identities; dispositional and organisational trust; extraversion and emotional stability) and the email sender's culture in the international business sample.



Table 7.2: Hypothetical interactions between moderator variables and email sender's culture

	Moderating variables	Interaction with sender's culture
1	Global identity	Hypothesis 11
2	Local identity	Hypothesis 12
3	Dispositional trust	Hypothesis 13
4	Organisational trust	Hypothesis 14
5	Extraversion	Hypothesis 15
6	Emotional stability	Hypothesis 16

▪ *Global and local identity*

Overall, there is no evidence of a strong interaction effect of culture or global identity on affective and behavioural reactions in the outcomes of this study. This is evidenced by the fact that when the recipient had a higher global identity and the sender was from a different culture, the recipient did not have less negative reactions. Hence, Hypothesis 11 was not supported. The findings also failed to show any significant interaction of the sender's culture and the recipient's local identity on these reactions, with no less negative reactions found when the recipient had a lower local identity, and the sender was from a different culture. Therefore, hypothesis 12 was also unsupported, suggesting that culture has little influence on how global identity and local identity can affect an international business professional's violation perception, affective or behavioural responses. Thus, information revealing that the email sender was from the same or different culture did not interact with the recipient's level of global identity to generate different affective and behavioural reactions towards the email violation, as workers from different cultures were no longer considered to be outgroup or targeted for discrimination. Indeed, working in culturally diverse and multicultural environments such as international business may, in fact, encourage cognitive flexibility among co-workers, which could also influence intergroup relations, lead to more tolerant outgroup attitudes and cultural groups, and reduce intergroup discrimination and prejudice, such as proposed by intergroup contact theory.

▪ *Dispositional and organisational trust*

The findings also revealed that there was no interaction effect of dispositional or organisational trust and the sender's culture on violation perception, positive attributions, happiness, worry, anger, guilt, and sadness and liking affective and behavioural reactions (compliance, move against, move away). Those with higher dispositional trust or organisational trust did not react in a less negative way when the sender was of a different culture than those with lower dispositional trust or organisational trust and when the sender was from the same culture. Hypotheses 13 and 14 were therefore not supported. Overall, it can be concluded that culture does not influence the effect of

levels of dispositional or organisational trust on how international business people respond to email violation. Diversity adaptation in international business work places may therefore increase positive attitudes toward multiculturalism, with workers in multicultural environments displaying cognitive flexibility, which can reduce discrimination against the email sender from a different culture and decrease intergroup prejudice, as has been suggested by intergroup contact theory. This multicultural principle may also be linked to less negative attitudes toward out-groups. Therefore, stating that the email sender was from a different/same cultural background did not interact with the recipient's level of trust to vary the affective and behavioural reactions towards the email violation.

- *Extraversion and emotional stability*

The findings expose that there was no interaction effect between extraction and sender's culture for violation perception, positive attributions, affective and behavioural reactions. The results suggest that extraverts do not react and behave different towards culture characteristics of the sender. Hypothesis 15 was not supported. The findings also reveal that there was no interaction effect between emotional stability and sender's culture for violation perception, positive attributions, affective and behavioural reactions. Hypothesis 16 was also not supported. Again, culture is not influential in how emotional stability influences the recipient's reactions to the sender. The effect of email sender's culture and the email receiver's characteristics (i.e. global and local identities; dispositional and organisational trust; extraversion and emotional stability) might have cancelled each other out.

The results suggest that individuals who have high global identity, low local identity, high dispositional trust, high organisational trust, high extraversion or high emotional stability did not react and behave different towards the cultural characteristics of the sender. This may be due to working in a global organisation, as they are used to communicating with people from other cultures, and it does not really influence their reactions, as a milieu of multiple cultures is the norm.

### **7.7.3 Interaction effects of global/local identity, dispositional/ organisational trust and extraversion/ emotional stability with email sender's status**

This section discusses the findings of hypotheses 17- 22 (see Table 7.3) about interactions between each moderator variable (i.e. global and local identities; dispositional and organisational trust; extraversion and emotional stability) and email sender's status in the international business sample.

*Table 7.3: Hypothetical interactions between moderator variables and email sender's status*

	Moderating variables	Interaction with sender's status
1	Global identity	Hypothesis 17
2	Local identity	Hypothesis 18
3	Dispositional trust	Hypothesis 19
4	Organisational trust	Hypothesis 20
5	Extraversion	Hypothesis 21
6	Emotional stability	Hypothesis 22

▪ *Global and local identity*

The findings of the interaction between global identity and email sender's status reveal that there was no significant interaction effect on violation perception and positive attributions. For affective responses, there was a significant interaction effect on anger only but not on happiness, worry, sadness, guilt and liking. Participants experienced less anger when they had high global identity and the sender was from the same status than when they had low global identity and the sender was from different status. For behavioural reactions, there was a significant interaction effect on the move against and move away tendencies, but not on compliance. Participants showed less tendencies to move against and move away when they had high global identity and the sender was from the same status than when they had low global identity and the sender was from different status. Hypothesis 17 was partially supported.

The findings of the interaction between local identity and email sender's status reveal that there was no significant interaction effect on violation perception and positive attributions. For affective responses, there was no significant interaction effect on happiness, worry, anger, guilt, sadness and liking. For behavioural reactions there was no significant interaction effect on compliance, move against and move away tendencies. Hypothesis 18 was not supported.

The findings did not show any significant interaction effects between local identity and sender's status on the affective and behavioural reactions to an email violation. The results suggest that individuals who have high global identity react and behave different towards status versus culture characteristics of the sender, as status was more influential. This may be due to working in a global organisation, as they are used to communicating with people from other cultures, thus it does not really influence their reactions. The insignificant interaction effects found may suggest that the effects of one variable cancel out the effects of the others when considered in combination.

- *Dispositional and organisational trust*

The findings revealed that there were no significant interaction effects of dispositional trust (DT) and sender's status on violation perception and positive attributions, but there were significant interaction effects of DT and senders' status on the affective responses of anger and sadness, as participants with higher DT, same status as sender experienced less anger and sadness, than other experimental groups, but had similar happiness, worry, guilt and liking, and had similar behavioural reactions. Hypothesis 19 was partially supported. The findings show that there were no significant interaction effects of organisational trust (OT) and senders' status for violation perception, positive attributions, affective and behavioural reactions. Contrary to expectations, those participants with higher OT receiving email from a sender of the same status, had similar reactions to the other experimental groups. Hypothesis 20 was not supported. These findings show again that DT is more influential than OT when considering the effect of sender's status on international business professionals' reactions to an email violation.

The findings support the results of Webster and Wong (2008) concerning virtual team members being more satisfied, as they can contact the distributed experts, access resources and have more freedom over tasks than the two others. Local members of semi-virtual teams stated more positive perceptions of their local (in-group) than remote (out-group) members, while traditional and virtual team members seem to be similar. The results suggest that individuals who have high dispositional trust react and behave different towards status versus culture characteristics of the sender, as status was more influential.

- *Extraversion and emotional stability*

The findings reveal that there was a significant interaction effect of extraversion and sender's status on violation perception, as the group with higher extraversion and same status as the sender perceived less violation. For attributions, there was no interaction effect. For affective responses, there was a significant interaction effect of extraversion and sender's status on anger and sadness; the group with higher extraverts and same status sender reacted with less anger and sadness, but had similar happiness, worry, guilt, and liking as other groups, and they were not more likely to comply, and were not less likely to move against and move away from the sender. Thus, extraverts dealing with a violation from someone of the same status have a generally positive reaction compared with other groups. Hypothesis 21 was partially supported. The findings reveal that there was no significant interaction effect of emotional stability and sender's status on violation

perception and positive attributions. For affective responses, there was a significant interaction effect of emotional stability and sender's status on anger, so the group with higher emotional stability and same status sender, had less anger, but similar happiness, worry, guilt, sadness and liking, and had similar tendencies to move against and move away as other groups. Hypothesis 22 was also partially supported.

The effect of email sender's work status and the email receiver's characteristics (i.e. global and identity; dispositional trust; extraversion and emotional stability) might have enhanced each other's effects. These findings highlight the crucial role of an email sender's work status, as it is more effective than culture within international business. Because people working in international business regularly communicate with people of other cultures, the impact of culture may have lessened in this group, whereas work status is extremely salient. The impact of work status may be enhanced by the increasing the value power distance amongst individuals in international business organisations. In the business world, status is earned through education, performance and promotion, and associated with higher earnings and greater power. In contrast, culture is inherited, and no longer necessarily associated with particular status groups, as the imperative of economic performance (which is improved based on education and experience) trumps ethnic heritage considerations in competitive global business environments. Hence, while culture may have had greater impact on communication reactions to violation in the past, this is no longer the case. In addition, culture may no longer be influential in international business reactions, perhaps because working in a multicultural workplace and having a sense of global identity has diminished cultural barriers. Hence, having a particular culture is no longer a barrier to effective email communication, even with violation, but having same or higher status is an advantage or facilitator of effective reactions, regardless of email violation.

## **7.8 Relationships between the Research Variables**

The findings displayed that familiarity moderates the relationships between violation perception and emotional and behavioural reactions. Familiarity was negatively correlated with negative affective and behavioural responses, and positively correlated with positive affective, behavioural responses, attributions and liking. These correlation results concur with McGoldrick's (2011) findings. However, the current research does not reiterate the suggestions of Stephens et al. (2009) and Lea and Spears (1992) that familiarity should not influence the perception of or reaction to email violations. This may be caused by using different methods to investigate familiarity

perception. The relationships between familiarity and affective and behavioural responses indicate that people who have more experience of email communication tend to evaluate the email or the sender less negatively, consistent with Byron's (2008) suggestion. The relationships between familiarity and emotions indicated that emotions can be engendered at the group level by way of social interaction, which can reinforce and control individual emotional reactions (Parkinson et al., 2005). Moreover, the present research added to our knowledge regarding email communication that collectivism and power distance were positively correlated with stronger affective and behavioural reactions, with less attributions and liking when norms of communication are violated.

The findings suggest that violation perception is positively related to negative affective and behavioural responses and negatively related to positive attributions. There were also inter-correlations between outcome variables, which indicates the complex relationship between these variables, as they cannot be distinct from each other. The increase or reduction of one variable may be associated with the increase or decrease of others. These results are consistent with the study of Cramton et al. (2007), which found that incorrect perceptions may hinder expectation and lead to dispositional effects, thereby disrupting collaborations. Further findings of the relationships between the study outcome variables indicate that some strong affective responses and positive attributions might have either fully or partially predicted (mediated) the behavioural reactions.

### **7.9 Mediating effects of affective reactions and positive attributions in Study 1 & 2**

The results revealed that more happiness and liking and less anger significantly mediated the effect of violation perception in predicting compliance in Study 1 samples. The findings indicate that the effect of norm violations in email communication to produce compliance depends upon happiness, liking and anger. An email causing strong affective reactions may lead to a positive behavioural reaction of compliance. In the international business (Study 2) sample, more happiness and liking were mediators required for compliance. These mediations suggest that the impact of violation perception is likely to be first upon happiness and liking, then upon the reaction of recipient's compliance.

The findings also show that more negative emotions of anger and guilt and less positive affective reactions of happiness and liking mediated the move against tendency (in Study 1). In international business (Study 2), more liking towards the sender prevented the move against tendency. Thus, the mediation effects are different in HE/HC versus international business. The above mediations

suggest that the impact of violation perception is likely to be first upon the affective responses, then upon the reaction of recipient's tendency to move against the email sender.

The findings demonstrate that more anger and less liking, happiness and positive attributions mediated the tendency to move away in the HE/HC sample (Study 1). In the international business sample, less happiness, liking, positive attributions, and more anger fully mediated the tendency to move away (Study 2). Thus, the affective reactions of more anger, less happiness, liking and positive attributions were found to mediate the tendency to move away in the HE/HC sample and in the international business sample. These mediations suggest that the influence of violation perception is likely to be first upon the affective responses and positive attributions, then upon the reaction of recipient's tendency to move away from the email sender.

The findings support the predictions of the appraisal theory (Smith et al., 1993) and are consistent with intergroup emotions theory (Mackie et al., 2000) and the findings of McGoldrick (2011), that more anger mediates move against tendencies. The findings show that affective responses to email communication should be the first target of norm violations. The email causing strong negative affective responses may enhance negative behavioural reactions.

The Study 1 model (Figure 2.3) was partially supported. It generally indicates the importance of both status and culture as potential moderators of the reactions to email norm violation. It also demonstrates that the sender's status is more influential than the recipient's status, and that the sender's culture is more powerful than the recipient's culture. Thus, the moderating effect of status and culture varied according to the participant's country and work sector. There were fewer culture moderation effects, demonstrating that status overrides cultural factors in many relationships tested in this study in relation to reactions to email violation. Individuals may experience precise emotions toward certain groups regarding their culture and status, depending on their appraisals of the intergroup context (Intergroup emotions theory, by Mackie et al., 2000). The intergroup action tendencies were sensitive to appraisal conditions, and the mediational role played by specific intergroup affective responses and attributions adding essential findings to the intergroup literature.

The Study 2 model (Figure 2.4) was partially supported, with a high amount of support for the moderating effect of global identity and dispositional trust, and little support for the moderating effect of local identity and organisational trust. However, it was not supported for extraversion and

emotional stability, suggesting no moderation effect of extraversion and emotional stability on the reactions to email norm violation.

In conclusion, the results support that sender's status and sender's culture influence the relationship between violation perception and emotions and the relationship between emotions and behaviours in different ways, depending on the participant's cultural background. These findings illustrating the various effects of status and culture on emotional and behavioural reactions, suggest that social control and cultural norms are very dominant in email communication. The moderation results add to the studies of Mackie et al. (2000) and Gordijn et al. (2006) in finding that sender's culture and status moderate the relationship between violation perception and anger, and between anger and the move against tendency. The findings indicate that the recipient's status and culture seem to be influential factors on the recipient's emotional and behavioural reactions to email norm violation. Both recipient's status and culture should be considered by the sender when writing an email message. A polite and non-norm-breaking email would be a safer way to avoid possible negative reactions by the email recipient.

Email recipient's tested characteristics were significant moderators, particularly global/local identity and dispositional/organisational trust. The moderation results were consistent with the independent samples t-test results, showing differences between high and low levels of these moderators in the study outcomes. These moderating effects highlight the importance in international business email communication of an email receiver's characteristics, including level of global identity, dispositional/organisational trust, extraversion and emotional stability, which further influence combined reactions related to work status and culture of both email sender and receiver. These more individual characteristics of international business people significantly influenced their affective and behavioural reactions to email communication violation. This means that, on top of work status and cultural background, professionals need to be mindful of how their own personal traits, trust and worldview affect how they react to emails from different in/out-groups.

The intergroup action tendencies were sensitive to appraisal conditions (Intergroup emotions theory), the mediational role played by a specific intergroup emotions and attributions, and the moderation role of culture and status, adds an essential finding to the intergroup literature. Participants' appraisal of email sender's culture and status moderates the relationships between violation perception and emotional and behavioural reactions as a role of group categorization and identification with this category. The findings also indicate that the participants' appraisal about the



email message and sender may be influenced by the recipient's characteristics such as global/local identity, dispositional/ organisational trust and personality traits.

The present study has shown that what we consider to be a very straightforward, convenient, easy to use form of communication with multiple benefits is actually fraught with huge potential to affect how others perceive us, and to influence our own emotional and behavioural reactions, depending on both the composition of an email message (e.g. perception of violation), and the social characteristics that we appraise in the email sender, which trigger our automatic social identity processes, which interact with our individual traits.

This chapter discussed the findings of Study 1 and 2, including the moderating effect of culture; the moderating effect of work status; the interaction effect of culture and work status; and the effect of cultural dimensions of collectivism and power distance. The chapter also discussed the findings of the additional moderating factors involving the direct effect of global identity, local identity, dispositional trust, organisational trust, extraversion and emotional stability. In addition, the chapter uncovered the findings of the interaction of each of these factors with email sender's culture and these factors with sender's work status, which were followed by discussing the mediation findings. This thesis is concluded by the following chapter, including theoretical and practical implications, limitations and suggestions for future research.

## 8 Conclusion

The present research is relevant to global communication, global virtual working, negotiating across cultures, managing international and multicultural teams, international project management, working effectively across cultures, leading across cultures, and global leadership, all of which rely on effective email communication from the email sender and on positive reactions to email senders' requests. This research found that email norms violation, including email etiquette and technical errors, are widely seen as an email violation by email recipients, and that the email recipient's behavioural reactions are moderated and mediated by multiple factors, which also differ depending on their occupational sector, as the present research found for healthcare and higher education sectors in UK and Saudi Arabia, and in three international business companies.

Two series of studies were conducted. Study 1 was designed to evaluate in more detail the moderating effect of both culture and status of an email sender on the recipient's emotional and behavioural reactions to an email violation, and to examine if emotional reactions, liking and attributions mediate the relationship between violation perception and behavioural reactions. These effects were tested cross-sectionally in two countries (the UK and KSA) in two different professional sectors (a higher education sample of lecturers and students, and a healthcare sample of doctors and nurses). Study 2 explored the moderating effects of both email sender's culture and status on the recipient's emotional and behavioural reactions to email violation in a new cross-sectional sample of international businesspeople. In addition, six other modifying factors were tested in Study 2 including global identity, local identity, level of dispositional trust, organisational trust, and two personality traits of extraversion and emotional stability on recipients' emotional reactions and behavioural tendencies in response to email violation. Previous research in the subject has studied the moderating effect of the email sender (Vignovic & Thompson, 2010), and the sender's work status (McGoldrick, 2011). However, these studies were limited to university samples in UK and USA, and they overlooked many additional factors that might influence reactions to an email violation that have been addressed by this research, which sought to answer the following questions:

1. Are emotional and behavioural reactions to norm violations in email communication moderated by cultural background and work status of the sender?

2. Are emotional and behavioural reactions to norm violations in email communication moderated by the receiver's global and local identity, receiver's dispositional trust and organisational trust, and receiver's personality traits (i.e. extraversion, emotional stability)?
3. Are receivers' behavioural reactions to norm violations in email communication mediated by their own attributions and emotional reactions (i.e. happiness, anger, sadness, guilt, or worry)?

## 8.1 Main Findings

The first series of studies found that all participants perceived email violation, but there were different effects by country. KSA participants reported stronger negative emotional and behavioural reactions (i.e. worry, anger, guilt, sadness and the move against tendency) towards email violation than UK participants, who reported more tendency to move against the sender who had the same culture. A similar culture negative bias was evident in the UK sample, increasing the effect of anger on the tendency to move against an email sender when from the same culture as the receiver, whereas the KSA participants reacted more favourably towards the same-culture sender, increasing the effect of happiness on the tendency to comply with the sender's request. By country and sector, there was a moderating effect of higher status negative bias in the UK HC, with a higher-status sender increasing the effect of anger on the tendency to move against the sender, but reducing its effect on the tendency to move away from the sender, whereas the sender's status did not moderate the reactions of the KSA HC sample. In addition, it was found that the effects of anger and guilt on the move against tendency were enhanced by lower-status sender (a lower-status negative bias) and reduced by higher-status sender in the KSA HE, whereas the sender's status did not moderate the reactions of the UK HE sample, in which higher levels of anger and guilt, and lower levels of happiness, liking and positive attributions mediated the relationship between perceived violation and negative behavioural reactions.

The second series of studies revealed that the email receiver's level of trust (organisational and dispositional) and their identity (global and local) have moderating effects on the study outcomes. However, there were few significant interaction effects of four characteristics (i.e. global identity, dispositional trust, extraversion and emotional stability) with the email sender's status, and no significant interaction effects with the sender's cultural background. Testing the research model to explore mediation and moderation effects revealed that happiness, anger, liking and positive attributions significantly mediate violation perception's prediction of compliance, 'move against' and

'move away' tendencies. Moreover, the level of receiver's trust (i.e. organisational and dispositional) and identity (i.e. global and local identity) all moderated the relationships found between violation perception and affective responses, and between affective responses and behavioural reactions to the email violation. However, the personality traits of the email receiver did not moderate the relationships between violation perception, affective and behavioural reactions. This chapter will discuss the theoretical and methodological limitations of the study, implications for policy and practice, and recommendations for future research on this under-researched area.

## **8.2 Theoretical Limitations**

There were some theoretical limitations of the present study. First, Mackie et al. (2000) developed the theory of intergroup emotions theory, which hypothesized that negative emotions (specifically anger and guilt) would predict negative behavioural reactions of move away or move against. A limitation of Mackie et al. (2000) was that they did not test emotions of worry, sadness or happiness. McGoldrick (2011) tested the variables anger, guilt, worry, sadness and happiness along with liking, which Mackie et al. (2000) omitted. With little previous research on the impact of affective responses on behavioural reactions, there is very little existing research to validate Mackie et al.'s (2000) theory, which the present study aimed to do. Due to this limited body of research, the present researcher was unable to formulate hypotheses to predict the unique impact of six affective responses on each of three behaviour reactions. Hypotheses must be tested to support or refute a theory or previous research findings. Mackie et al. (2000) did hypothesise that high anger emotional reactions would predict higher move against tendency, but this research did not consider their conceptualisation of anger and guilt in depth. Instead, the present research formulated more general hypotheses whereby affective responses would mediate the relationships hypothesised in the research model.

A further theoretical limitation of the present study is that the researcher only tested the moderating effects of two of the Big Five personality traits (extraversion and emotional stability). It is possible that the other personality traits of agreeableness, conscientiousness and openness to experience may also moderate relationships tested in Study 2. For example, international business professionals rated high on agreeableness might be more likely to comply with an email sender's request (as they tend to want to please people), regardless of perceived email violation; whereas people low on agreeableness might be more likely to move against the email sender. People high

in conscientiousness tend to be very organised and orderly, and might react more negatively to violations of etiquette or technical/grammatical mistakes in the email vignette.

In contrast, people low on conscientiousness tend to be disorganised and less preoccupied with order; hence they might have lower perception of email violation, thereby reducing negative reactions. Finally, people high on openness to experience tend to be more curious, imaginative and interested in culture, whereas people low on openness tend to be more down-to-earth, interested in everyday matters rather than abstract or cultural interests. Hence reactions may differ along this continuum too, but this study did not consider these effects. Moreover, another theoretical limitation is that moderating effects of extraversion and emotional stability were only tested in Study 2 on the international business sample, and were not considered in Study 1 on the healthcare and higher education samples. It is possible that extraversion and emotional stability do have some moderating effect on lecturer/student and doctor/nurse reactions to an email violation, although they were found to have no effect on international business reactions to email violation in Study 2.

As trust is a key condition required for effective communication, the omission of the trust variables (dispositional trust, organisational trust) in Study 1 for healthcare and higher education samples is a theoretical limitation, as we do not know the impact of trust on perceptions and reactions towards email violation among doctors/nurses and lecturers/students. In Study 2 high levels of trust were found to negatively moderate (reduce) negative emotional and behavioural reactions in an international business sample. Similarly, future studies could test the hypothesis that high levels of trust would negatively moderate (reduce) negative emotional and behavioural reactions in healthcare and higher education samples, to overcome this theoretical limitation.

Furthermore, a limitation of social identity theory (Tajfel & Turner, 1979) and self-categorisation theory (Turner, 1981) is that they did not hypothesize specific effects of status and cultural differences representing in-groups and outgroups. They talked more generally about in-groups and outgroups, but social identity theory overlooked the interaction of different group memberships (e.g. same status = in-group, but with different national culture = outgroup), in other words, an individual on some social categories can be perceived as in-group (same status), but perceived as outgroup in other social categories (e.g. different national culture). How an individual might react to more complex social categorisation in such scenarios was not considered in social identity theory, which iterates binary alternatives whereby a person is either in-group or outgroup, based on particular characteristics. Therefore, the present study was not able to formulate hypotheses to explain the

combined effect of in-group/outgroup characteristics in an email sender, relative to the recipient, e.g. same status but different culture from the email recipient.

Similarly, the SIDE model, which revised social identity theory for application to online group communication, is more deindividuated as there is less social information about the communicators, but it will react similarly negatively towards outgroups if there is similar social information online as per a face-to-face encounter. The SIDE model also does not consider the complexity of how people respond to individuals online who have multiple group identities (i.e. same culture/different status, for example). Therefore, the theoretical limitation is within social identity theory and SIDE model limited explanations of complex intergroup behaviour, which may limit research into reactions towards conflicting social/group identities in others (same culture/different status or different culture/same status) relating to whether an individual is perceived as in-group or outgroup.

Finally, it is possible that other unknown factors that were not included in the research models in Study 1 or Study 2 may also play a role in predicting behavioural reactions towards email norms violation, such as gender. It is possible that men and women may have different emotional reactions towards gender, culture and status of an email sender, hence gender might moderate their behavioural reactions. In real-world email communication, the recipient is usually aware of the gender of the email sender from their first name, while current mood might moderate how people react to email violation and subsequent emotional and behavioural reactions. For example, Morinagaa et al. (2008) found that doctors in Japan are perceived as moody and short-tempered, and such negative predispositions might increase the tendency toward more negative emotional and behavioural reactions towards email violation.

Additionally, a person's level of empathy towards others (i.e. their ability to feel what the other person may be feeling or experiencing) could be a relevant construct for perceptions and reactions towards an email violation. Nurses and doctors are a professional group who are perceived to have intrinsically higher levels of empathy towards others due to the nature of their work, therefore it is possible that they might react more considerately towards email violation and attribute it to the adverse personal circumstances of the sender rather than deliberate rudeness or disrespect. Finally, time-pressure (i.e. how busy a receiver is) might influence how receivers react to email violations. For example, a very busy person tends to quickly scan email sender and content and selectively glean request or essential information provided, with less concern about superfluities

such as courtesy and technicalities of language; when very busy, the recipient may react less strongly to an email violation or not even notice it, which warrants further research.

Theoretically, there is a potential element of 'habituation' involved in perceptions and reactions towards email violation; if professional emails containing violations of etiquette norms or technical/grammatical errors are frequently received, the perceived violations become less shocking or egregious and ultimately the receiver becomes accustomed to these violations and assumes that norms of professional email communication have changed. If this study was to be replicated in five or ten years, it is possible that perceptions of email communication violation would have changed. Due to texting and instant messenger and increasing use of smartphones with limited keyboard size, millions of texters now use common abbreviations (e.g. FYI, IMOP, LOL, BW, b4, 2, asap, 4ever, re), more brief message content, far less formality, and no etiquette norms for texting or instant messaging. These developments are increasingly transferring to how people communicate via email, and in some cases replacing use of traditional email altogether (e.g. with increasing professional use of Skype, WhatsApp and Viber etc.)

### **8.3 Methodological Limitations**

This section discusses the methodological limitations of Study 1 and Study 2, as methodological limitations might reduce the internal validity and external validity of the research findings. Internal validity relates to the validity of the measurement tools used, and to any measurement bias which may have occurred during the data collection procedure. External validity relates to the extent that we can accurately generalize the findings to similar study populations in the real world (beyond the study sample), i.e. how representative the study sample is of the target populations.

As previously indicated, the current research studies provide clear evidence that the reactions to email norm violations are indeed influenced by information revealed about the sender, namely work status and cultural background, and also by the recipient's characteristics, namely work status, cultural background, global/local identity, level of dispositional trust and organisational trust, level of extraversion and emotional stability. However, the studies were necessarily limited in scope by using only higher education and healthcare contexts in the UK and the KSA, and by focusing on only some of the factors that might influence reactions to email violation.

Another possible limitation that could have been made relates to the classification of status in Study 1, in which a student sample was used to represent the 'lower status' group in higher

education, while using lecturers to represent the 'higher status' group. This classification may be arbitrary, as the research was intended to study moderation and mediation effects on reactions to email violation in 'professional organisational life'; however, most college students are non-professionals, with consequently more informal email communication, not having learned the required etiquette norms in formal communication. The work status relationship between students and lecturers is not a professional relationship such as that which exists between doctors and nurses or managers and subordinates, all of whom are qualified professionals receiving a salary (unlike most students). This may partly explain the consistent 'lower status bias' found in the higher education sample, as while lecturers know they are not dealing with a professional group in students, they do expect their position to be respected through polite correct communication as per academic traditions and conventions. It may have been useful to select an alternative 'lower status' sample within academia, such as administrators or teaching assistants, or consider lecturers as lower status than professors for example.

The status differential in the university and healthcare was manipulated. There is a comparable status differential between doctors and nurses and between lecturers and students, although the degree of perceived status differential might differ between the sectors. The reaction between student and lecturer is different from the one between doctors and nurses in this research, which the researcher attributed to students being non-professionals, and not being reacted to as such (i.e. professionally) by lecturers in response to an email violation, whereas doctors would react more professionally to nurses, who they consider to be valuable co-workers, despite their status differential. The perceived status differential might differ between the two cultures, which may explain why there was a greater difference in reactions in UK between doctors-nurses, as compared with lecturers-students, which was not found to be significant in KSA.

The comparison between lecturers and students inevitably involves confounding between status (high vs. low) and age. Lecturers were on average several years older than the students. For example, lecturers may perceive more violation than students because they are older rather than because they have higher status. The doctors were on average older than the nurses. The limited exploration of age is certainly a limitation of this research, which was addressed by controlling for age when comparing the effect of status on emotional reactions to email violation; age was a significant covariate in both UK and KSA, suggesting that older people react more negatively to email violation than younger people. Older people are accustomed to a more traditional formal



communication style within organisations, whereas younger people (e.g. in their 20s) have been raised with internet, instant messaging and SMS texting, which tends to be more informal, including frequent use of abbreviations, short length, symbols and emoticons, which they consider to be normal text-based communication. The age effects on reactions to email communication violation are very important for work-based email communication between staff of different generations, and they warrant studies of their own, given the generally huge differences in experience of using digital communication and social media.

By limiting the measurement of affective reactions to happiness, sadness, anger, worry and guilt according to McGoldrick's (2011) model a bias toward negative affect (N=4 scales) in the emotional responses measured was noted, as compared with positive affect (only happiness scale). There are clearly many more positive emotional responses, such as humour, amusement, compassion, empathy, curiosity and interest, as well as neutral emotions that could occur in response to an email violation (based on reaction to the message content/sender characteristics). In addition, more negative emotional responses are possible, such as disgust, frustration or pity and resentment, which is an emotion very different from anger, worry, guilt or sadness. Furthermore, behavioural reactions in the current research were limited by using only three types, whereas there is also the possibility of 'delayed reply', which could have been added, as there seems to be an expectation that people respond to emails within a certain time.

Regarding the Big Five personality traits, the author chose to focus only on extraversion and emotional stability, whereas others could have been selected. Regarding other moderators which might have influenced the participants' responses, only organisational and dispositional trust were focused on in this research, whereas Vignovic and Thompson (2010) measured qualities including intelligence, competence and trustworthiness that recipients attribute to the sender of an email violation. It would also seem that trustworthiness could have been examined as a mediator of reactions to email communication.

Additional cultural dimensions could also have been added as possible moderators of reactions, but this research was limited to the investigation of the effects of individualism/collectivism and power distance. Uncertainty avoidance would seem particularly pertinent here, as this factor may influence how likely people are to make attributions and react, and how they are influenced by the contextual information provided, with the impact of the email and the manipulated situational

context, possibly differing from the impact of the email in real communication, particularly if participants are aware of such manipulation.

Furthermore, the author's choice of measuring the perception of violation perception as one global construct, rather than using the Vignovic and Thompson (2010) model of separating them into two different aspects (technical errors and violation of email etiquette norms) resulted in difficulties in determining which aspects of the email communication violation were responsible for the various effects (emotional and behavioural) found in this research. For instance, Vignovic and Thompson (2010) found that recipients are more tolerant towards email violation due to technical errors by a foreign email sender, as they acknowledge the foreign sender's grasp of a recipient's language may not be fluent. However, recipients were not tolerant of email etiquette violation from a sender with a known or unknown culture. In addition, in the present research, it is impossible to tell which aspects of the email content violated recipients in the UK and KSA and the three organisational sectors.

Another improvement that could have been made in order to standardise data collection procedures and thereby reduce response bias procedures would have been to have used the same kind of survey questionnaire rather than using both an online survey questionnaire and a paper-based one. Furthermore, in the questionnaire used in Arabic, although the quality of translation in both questions and responses was of a high standard, some words may still have lost their original meaning in Arabic, which might have led to a lack of clarity in responses. For example, in Arabic 'saed' means both 'happy' and 'pleased', with no differentiation in meaning as in English. However, it has been assumed that every recipient of the email vignette in this research has a fluent understanding of written English, whereby they could recognise a violation of email communication norms in the studied emails. It is possible that some participants had insufficient English fluency to recognise email communication violation in the email vignette.

Caution is required when interpreting the findings from this research due to the fact that there was no control condition (e.g. neutral email) in this research. As a consequence, it is hard to be confident that findings reflect specific reactions to the email violation presented rather than more general emotional and behavioural reactions. For example, KSA participants generally showed more negative emotional and behavioural reactions than UK participants. It is not possible to be sure that these differences are specific to the situation used, rather than being more general (e.g. some cultures are generally more emotional than others under most circumstances); KSA

individuals characteristically have different reactions to stimuli and situations than their UK counterparts regardless of the stimulus or situation. It may be argued that a neutral control condition (i.e. non-norm-breaking emails) should be included into future research, to determine if it was really the email violation that influenced the email recipients' attributions, emotional and behavioural reactions by comparison with the control group outcomes.

The designs used in this research are artificial in various ways. For example, the email contained within the questionnaire had no real consequences for the participants. The emotional and behavioural responses might have been greater in a 'real-world' context. Perhaps the relative lack of importance of the in-group versus out-group distinction with respect to the status or culture variables occurred because the distinction matters less in an artificial situation compared to an actual work one. It could be argued that vignette research has low external validity, as participants are presented with hypothetical scenarios, which they may not feel personally affected by to the same degree that they would react in a real-world situation. Collett and Childs (2011) compared findings from vignette-based and laboratory experimental studies on reactions, and found that a more tangible (laboratory) experience increased the intensity of emotion reactions compared to a vignette experience. However, it could be argued that laboratory experience is also artificial, as many factors are controlled for; and reactions may again differ in a more naturalistic setting.

There is really a need for field experimental research to determine the effects of email violation in real-world settings, in collaboration with information technology departments, and with the consent of participants, whereby email violations could be circulated to a random sample of participants who are blinded to the aims of the research and timing of the email violation, to assess their natural reactions. This might be ethically challenging to implement such a study in healthcare, due to the high-risk nature of their work; but it might be possible in the higher education and business sectors; where people's critical wellbeing is not at risk.

It is probably typical in work settings for a worker to receive numerous emails from some other workers in the same organisation; perhaps there are learning effects whereby workers gradually learn how to communicate effectively and without problems with each other. The email vignettes in this research did not stipulate whether the sender was internal or external to the organisation, but this parameter could also influence how individuals respond to an email violation, depending on whether the sender is an internal staff member or an external client/inquiry. All of these noted limitations indicate the intrinsic complexity of this area of research, and because it is so under-

researched, and yet so important for organisational communication, there is scope for much more investigation to understand all of the antecedents that predict how people respond to email violation, after controlling for all possible confounding and moderating factors.

Another limitation/ suggestion for further research is that email communication within organisations can be task-based or social, which may also influence how people respond to an email violation. For example, they may react more tolerantly to an email violation in a social context (e.g. organising a social event, or non-work related internal email communication between co-workers); and react more intolerantly to an email violation in a task-based context, where more professionalism is expected.

The manipulation of email sender's culture ("sender is from the same cultural background as you" or a "different cultural background") may be sufficiently vague as to be ambiguous and open to various interpretations. Perhaps giving specific named cultures might be more effective. This limitation was noted in the discussion chapter; taking the idea of comparing "same" versus "different" culture was derived from the social identity theory concept of in-group versus out-group, but when it comes to cultural background social identity theory is too simplistic, as a given culture has different perceptions of various different cultural out-groups, and may have more favourable/negative reactions, depending on the specific cultural background of a real-world email sender. For example, a Saudi professional is likely to react very differently to an email received from UK versus one received from Egypt or the UAE, although all three cultures are by definition from different (i.e. non-Saudi) cultures. Again, this limitation highlights how much further research is needed, as multiple studies are required to isolate differential effects of email violation on different named cultures/countries of both sender and recipients.

Since the research only compared the UK and Saudi cultures, it is very difficult to establish which aspect of cultural differences was primarily responsible for any effects on dependent variables observed. More specifically, while the two cultures mainly differ in terms of individualism-collectivism, they also differ in power distance and in high- vs. low context and in other ways. Future research might be needed to sample numerous cultures to clarify which aspect of cultural differences has the greatest impact on reactions to emails. Future research could also consider conducting qualitative interviews or focus groups with participants of selected countries/cultures, to understand in more depth why people respond in certain ways to email violations, and to what degree they believe these reactions are influenced by their culture. At the same time, as people

tend to be ethnocentric within their own culture, they may not be consciously aware of how their own culture influences their reactions. Additionally, focusing solely on culture overrides the additional influence of individual differences such as personality traits, which was somewhat explored in Study 2. However, it was not the purpose of this research to establish cross-cultural differences in people's reactions to email violation. Finally, although the limitations of the study regarding its size and scope clearly present only a small snapshot of the extent of email violation and its moderators, it has nevertheless allowed the opportunity of identifying issues that have wider implication both in theory and practice.

#### **8.4 Theoretical Implications**

The findings of this research have led to the identification of many issues and predictions which have not previously been highlighted in the literature, and can thus contribute valuable new knowledge to the field, particularly to the literature on group-based emotional and behavioural reactions. Perhaps the most significant finding of theoretical import is the influence of status (same, lower, higher) and cultural background (same, different), as the research offers empirical confirmation that participants are likely to perceive more violation and negative affective and behavioural reactions when communicating via email when aware of the email sender's cultural background and work status. However, although providing information about the email sender's cultural background was found to moderate the reactions to email violation, releasing information about the email sender's work status influenced all samples, indicating the global influence of status. This clearly indicates that in UK/ less collectivistic cultures, negative reactions to email norm violations may be reduced if information about the cultural background of the email sender is made known. In addition, within the KSA sample, regardless of type of culture, a more general awareness of lower status may result in an increase in the negative reactions to norm violations. It can clearly be seen, therefore, that status is of special significance and should be carefully considered in email communication within these two sectors, and probably even more so in high power distance work contexts.

Moreover, the research highlighted that the work status of an email sender in fact plays a far more crucial role than the other factors studied in this research, and that the email receiver's characteristics (i.e. global identity; dispositional trust; extraversion and emotional stability) might reciprocally enhance their effects. This may be due to the increase in regular communication between people of different cultures in international business, multicultural workplaces and other

contexts, resulting in an increasing sense of global identity, which may diminish cultural barriers and thus reduce the impact and influence of culture in international business reactions within this group. In contrast to culture, work status is relatively salient, as cultural factors seem to have little impact on violation, but the effect of having the same or higher status can be an advantage or facilitator of effective reactions, regardless of email violation. The current research is therefore extremely valuable as it extends recent previous studies on email communication, an area which is very under-researched, yet very important for effective communication in organisational life.

More specifically, as previously indicated, there was found to be a lower-status bias in the effect of status on both email sender and receiver. In addition, findings indicate that work status is more influential regarding such bias than group membership, and can even overcome the notion of out-group bias, demonstrating that an appraisal of the email sender's status as in-group/same status increases the experience of negative emotions towards intergroup or an opponent group/ lower status. Furthermore, the findings also show that intergroup behaviours differ following the manipulations of group-relevant status and, interestingly, demonstrate that having/ showing a lower status makes individuals more vulnerable to being treated more negatively (less respectfully and less equally) in email communication, which provides evidence that having (and showing you have) the same work status as an email recipient can assist as a protective element against negative behavioural reactions (i.e. move against or move away from the sender). Regarding the email receiver's status, the current research also revealed that higher-status receivers reacted more negatively than lower-status receivers, perhaps because the former have more power over the latter. These findings again clearly demonstrate the importance of work status within email communication, and thus significantly support and extend this area of research. Furthermore, they clearly indicate that as well as taking the status of the email receiver into consideration, people of lower work status are a particular group that need to be trained in how to compose professional emails, with sufficient courtesy and assertiveness to receive positive reactions.

As already indicated, the appraisal of an email sender from a different culture influences the relationship between affective and behavioural reactions. The UK sample, which represents Western culture, displayed more out-cultural bias (taken from in-group bias) rather than in-cultural bias. As the UK culture has particularly low collectivism, it differs from highly collectivistic cultures' propensity toward in-cultural favouritism, which may suggest that individual norms in lower collectivistic cultures have less negative/more positive reactions towards out-group members, and

an appraisal of a similar culture may increase the negative reaction toward individuals from the same culture. Therefore, according to individualistic norms, the out-group may be treated in the same way that the in-group is treated (Matsumoto et al., 2008). This can be attributed to the high value that a lower collectivistic culture places on individualism, resulting in increased tolerance to individuals from other cultures as opposed to their own culture, demonstrated in this research by the increased tolerance towards mistakes made by out-groups.

In addition to the findings related to lower collectivistic cultures, the present research also identified a few significant differences in reactions to email violations in high collectivistic and high power distance cultures, by which stronger negative emotions and intentional behaviours are more likely to be found in the email receiver. Hence, it can be identified from the results of this research that cultural issues arising from collectivism/individualism and power distance cultures are important factors in email communication, and by demonstrating the significant effect of the cultural background of email receivers, and the effects of low collectivism on reactions to norm violations, the importance of the effect of cultural background norms on differences in cross-cultural communication is clearly highlighted, thus supporting and extending research in cultural dimensions of individualism/collectivism and power distance (Hofstede, 1980). Consequently, in order to raise awareness and expertise in cross-cultural communication, employees should be provided with information about these different global cultural values, and how they might affect online communication behaviour.

As already identified, the current research sheds light on the effect of the interaction between the email sender's cultural background and status and is the first cross-cultural research to investigate the relationship between cultural background, work status and reactions to norm violations in email communication with regard to an email sender's and receiver's status and culture. From the two studies (particularly Study 2), when the email sender's status and culture were made evident, participants experiencing a norm violation showed same status/different culture favouritism and different status/same culture bias. The findings indicate that the appraisal of the sender's status and culture generate negative emotions, behavioural reactions and attributions. When the same status/different culture and different status/same culture violated communication norms, appraisals made group members more prepared to report negative emotions and negative intentional behaviours with different status/same culture members.

Important contributions have also been made by the present research to literature on the theories of social identity and self-categorisation and the SIDE model. Firstly, the current research concluded that the concepts of out-group bias and in-group favouritism were not always valid, and were in fact rejected by the status findings, with no bias found against individuals who had different status because they were out-group members, and status was found to be a different component from in-group and out-group, with the former possibly having more influence in the workplace than the latter. It is also clear that the concepts of in- and out-group should not be generalized, especially in multi-cultural or individualistic work environments, as (perhaps due to the impact of globalisation) individuals from the same cultural background are no longer automatically considered to be in-group members, and individuals from a different cultural backgrounds are no longer necessarily regarded as out-group members. In addition, cultural, personal and organisational factors may also impinge on the social identity and self-categorization theories. For example, Vignovic and Thompson (2010), as well as the current research, found bias against the email sender who is from the same cultural background (in-group).

Regarding the influence of the overall characteristics of email receivers on emotional and behavioural reactions, the research findings demonstrate that when information is given about the cultural background and status of the email sender, and if there is a high level of global identity, trust, extraversion and emotional stability, this may lead to a reduction in negative reactions, which may indicate the impact of these characteristics on the receiver's appraisal. Furthermore, internal factors related to the email receiver, and external ones related to the sender, may increase or decrease the reactions to email norm violations. The findings from this research that these characteristics may be significant factors, thus also making a valuable contribution to this field of research.

The appraisal theory (Frijda, 1986) and intergroup emotions theory (Mackie et al , 2000) are also supported and extended by this research in its findings that specific reactions to violation perception were mediated by specific emotions. Email receivers, influenced by their own cultural background and status, and factors of global or local identity, trust and propensity to trust and personality traits, are likely to appraise the email sender according to their status and culture, resulting in different emotional reactions towards the sender. Therefore, it can be said that the appraisal may be influenced by the cultural background and status and other characteristics of both email sender and receiver.



The understanding and implications of global and local identity constructs highlighted in this study are further significant factors which support and enrich this field of research. Although the most significant moderation effects were mainly attributed to global identity (positive), there were also some local identity (negative) effects on emotional and behavioural reactions in email communication within the international business sample. More specifically, it was found that when email norms are violated by the sender, a high level of global identity in the email receiver reduces negative reactions, whereas local identity increases negative reactions. Thus, in the current research, a high level of global identity, originating perhaps from multi-national and multi-cultural work environments, is emphasized as having a positive impact, which may increase email receivers' tolerance towards senders who violate local norms, also indicating that workers in these environments may be influenced not only by the local norms, but also by their global and local identities.

In addition, the results support the idea that global identity and local identity are separate constructs, as they were shown to have differential moderating effects on the level of perceived violation, and on some of the affective responses and positive attributions made, as well as on some of the behavioural responses. Improvement in online communication within virtual multicultural organisations could also be facilitated by developing global identity through training (Erez et al., 2013). Thus, it can be concluded from this research that, in general, higher global identity and lower local identity tend to have more positive effects on how international business professionals respond to an email violation at work; these findings support the social identity framework proposing that individuals may have various identities (Tajfel & Turner, 1979), in this case their global and local identity.

The exploration of the moderating effects of dispositional and organisational trust in this research also supports and extends research in this area, confirming that trust seems to play a crucial role in e-collaboration between team members from different cultural backgrounds (Berry, 2011; Fulmer & Gelfand, 2012), and providing credibility to researchers who suggest that trust is related to vital workplace behaviour outcomes. While much existing research emphasised the significance of trust ensuring a virtual team's success and performance, this research suggests that dispositional and organisational trust moderate the relationship between norm violation perception and affective responses, and between affective responses and behavioural reactions of the individual and virtual team members. More specifically, the current research indicates that high levels of dispositional

and organisational trust decrease the negative reactions amongst individuals (receivers) towards email norm violations, with the suggestion that high trust individuals may be more tolerant towards etiquette and technical errors in email messages than low trust people, who may react more strongly and suspiciously towards such messages, suggesting that an increase in individuals' dispositional and organisational trust may be beneficial in enhancing email correspondence. Hence, in order to develop organisational trust amongst workers, it is essential for companies to establish trustworthy relationships between employers and employees, with the intention of positively influencing employees' collaborative decision making and online communication behaviour, and thus increasing the opportunity of personnel collaboration with worldwide partners.

The non-significant findings of the current research related to the influence of extraversion and emotional stability on email communication indicated that recipients' levels of extraversion or emotional stability did not influence their reactions to email norm violations. Negative reactions to email norm violations seem not to be reduced or increased by these two personality characteristics, thus demonstrating that individuals who have higher extraversion or emotional stability may not be more tolerant regarding norm violations of email communication, and may not form positive expectations toward the email sender. This research's contributions additionally lie in its reinforcement of demonstrating the limits in testing personality traits such as extraversion and emotional stability as predictors of emotional and behavioural reactions to norm violations in email communication, and also in its findings that in the case of norm violations in email communications, the way a norm violation is perceived and its corresponding positive and negative emotion or behaviour may not depend on whether the individual is an introvert or extravert. Consequently, the presence of extraversion and emotional stability may not encourage or enhance email collaboration.

The non-significant interactions between the recipient's characteristics (i.e. global and local identities, dispositional and organisational trust, extraversion and emotional stability) and the email sender's culture may indicate that the email sender's culture is less effective within international business than sender's work status, which interacts with the recipient's characteristics (global identity, dispositional trust, extraversion and emotional stability). Individuals working in international business regularly communicate with people of other cultures, thus the impact of culture may have lessened in this group, whereas work status is extremely salient. The impact of work status may be enhanced by the increasing value of power distance amongst individuals in international business

organisations. In the business world, status is earned through education, performance and promotion, and associated with higher earnings and greater power; preferment according to cultural affiliation, which does not generally contribute to economic efficiency, is increasingly archaic in this environment. In addition, culture may no longer be influential in international business reactions, perhaps because working in a multicultural workplace and having a sense of global identity have diminished all cultural barriers. Hence, having a particular culture is no longer a barrier to effective email communication, even with violation, but having same or higher status is an advantage or facilitator of effective reactions, regardless of email violation.

Experiencing diversity increases tolerance, cognitive flexibility, positive intergroup attitudes, creativity, team performance, problem solving and encourages social change (Crisp & Turner, 2011). There must be greater adaptation to diversity in future, with increasing economic globalization entailing increasingly globalised work cultures, including face-to-face and online communication and collaboration in multicultural teams (particularly in healthcare, educational and multinational business organizations). While this process is inevitable, attitudes and attributions towards other cultures/diversity and outgroups have lagged behind, although they will also change along with emotional and behavioural reactions to perceived violations. The present study suggests there may not be one outcome or another over time, as we found differences in reactions, depending on organizational sector and country. Diversity is about in-group versus outgroup, but in reality professional groups contain individuals who may have qualities of both in-group and outgroup (e.g. same status/different culture or same culture/different status), which itself constitutes diversity.

In our study, we found that NHS healthcare professional were more tolerant to senders of a different culture. This may be due to the pro-diversity policy of the NHS, and focus on increasing cultural competence towards patients from minority ethnic groups (as part of a professional milieu generally permeated with intense diversity), whereas this policy has not been so well developed within higher education. In international business, diversity is accepted as part of the need for people from different countries to work together positively to meet their mutual needs and business goals. This would explain why international business participants had a less negative reaction towards senders from different cultures. Having looked at people's reactions to diversity in email communication in this study, it is possible that through training people will adapt to diversity and be more tolerant towards email violation from outgroups in the future.

Affective responses are additional important influential factors, and the current research has contributed to the literature by revealing that such responses can mediate the relationships between violation perception and behavioural reaction, showing that affective responses to email communication are likely to be the first target of norm violations, followed by the behavioural reactions of the email receiver, with control over the emotional responses fully or partially preventing behavioural reactions. Thus, an email causing strong negative affective responses may enhance negative behavioural reactions. Intergroup action tendencies were also found to be sensitive to appraisal conditions, with the mediational role played by a specific intergroup emotion adding further essential findings to the intergroup literature.

The current research, unlike previous studies, has taken into account many additional factors that might influence reactions to email violation, and also extended the research beyond only the use of student samples. Its findings that cultural background, status, global/local identities and dispositional/organisational trust moderate the relationships between violation perception and affective reactions, and between affective reactions and behavioural reactions, is of great significance in the field, shedding light on the significant effects of the interaction between the email sender's cultural background and work status and the receiver's characteristics.

Recognising that these additional factors may increase or reduce the emotional and behavioural reactions to email norm violations within email communication and collaboration, it also contributes to the literature by recognising the important need within organisational contexts to avoid the negative effects of norm violation on perception, emotional and behavioural reactions (e.g. non-compliance, move against or move away), and instead to enhance positive reactions. Organisations can therefore clearly benefit from the implications of the current research by considering these moderating factors, by designing and applying training programmes to ensure successful email communication.

The results from this research also suggest that professionals have a preference for more formal and polite email communication, as every participant in this research, from all three professional sectors, and two different national cultures, reported that the email was a violation of their email communication norms, which suggests there are some global standards for composing an appropriate email in business, higher education and healthcare. These 'standards' may need to be taught to people within organisations, as it is assumed that people can write a competent, professional email that will be complied with respectfully, yet we know that many people have

become careless in their online communication, as informality is the dominant tone in most instant messaging and social media, which may transfer to email. However, the research clearly indicates that it is essential that the sender writes and revises the text of their email message carefully in order to convey a polite and respectful message which may enhance positive reactions towards it.

Finally, the research extends the scope of the previous studies researching into this area, by including a larger sample from three different organisational sectors (i.e. higher education, healthcare and international business), as research findings from university-based samples have only limited generalizability to the other sectors, and they are not being very representative of the larger population. As such, these three sectors (i.e. higher education, healthcare and international business) offer an environment where e-communication takes place between groups of various status, and such variance can help to obtain better results as part of the research for this thesis.

## **8.5 Practical Implications**

### **8.5.1 General implications**

In addition to these important contributions to theory, this research area, although in its infancy, has a number of significant practical implications and thus great potential to inform recommendations for organisational practice. From the results of the research, which has clearly highlighted the factors which moderate norm violations in email communication, it is evident that it is crucial to raise the awareness of individuals in the three sectors under investigation (higher education, healthcare and international companies) of the negative effects of norm violations on the perceptions, emotions, attributions and behavioural reactions of recipients of emails. Workers should be trained and taught about email communication norms and given a clear structure for dealing with email composition, and email violation. Indeed, as part of the induction programme of new staff, organisational departments, such as IT and HR, should provide presentations on email policy and communication, with clear rules and guidelines how to communicate by email, ensuring such sessions are offered regularly throughout the year, along with creating and implementing an online handbook with suggestions how to deal with and respond to email violations. It is clear from the research that many employers make the assumption that their employees latently have this awareness, therefore they do not need to monitor their performance and provide training, but the issue is crucial for the effective communication that is required in the modern world. Indeed, knowledge about email communication skills should form an important component of the worker selection criteria. Within the context of higher education, these issues are also currently

unaddressed, and it is imperative that students receive training in how to communicate via email with lecturers in order to avoid norm violations.

In addition, workers dealing with email should be provided with situational information about their communication partner, their name, status, country and cultural background, before establishing any connection with them. Such information could moderate any violation, mistakes or misunderstandings, particularly when they are from different cultural backgrounds. Cross-cultural miscommunication is another important aspect of email violations, and organisations should also develop strategies in the workplace to address this important issue, raising awareness and also aiming at encouraging tolerance of violations caused by such misunderstandings.

Regarding the important area of personality traits, which the research has identified, this has significant implications in the selection of workers in organisations, offering the potential for employees who are high in dispositional trust, high in global identity and low in local identity to be selected to work in appropriate positions in virtual organisations. Such improved selection of staff could help to increase their performance and improve online communication within and between organisations, as these characteristics have been found to serve collaboration in online communication and to reduce negative emotional and behavioural reactions to email violations. It is hoped that these findings may facilitate inter-disciplinary and cross-cultural collaboration in higher education, healthcare and business fields by improving communications in universities, hospitals and businesses in the UK and Saudi Arabia.

The research has further implications outside of the confines of the workplace. It is clear that the extent and significance of email violations that the research has highlighted also have applications for developers of email software, such as Microsoft Outlook, which is widely used as part of Microsoft Office software. New applications could be developed to proofread and correct technical errors, and provide standardized templates for various types of email communication across cultures, such as models of how to address the recipient, the use of appropriate sign-off strategies and signatures, and the appropriate length, prose and formality required in national and cross-cultural communication. Such applications could thus help to prevent violation problems occurring at source. Such proofing applications are already widely available on traditional and internet phone text message services, but little used – perhaps signalling the need for organisational training in the use of such features, as is customarily provided as part of general staff training for the proficient use of other software such as Microsoft Excel.

To conclude, the research has indicated that there is too much at stake, particularly regarding business, international and multi-cultural relations, to allow staff to continue to communicate electronically with colleagues and overseas partners without some form of email policy and procedures in place, as well as regular email monitoring by the information technology department, a practice which should be acceptable, as governments routinely monitor the email content of their citizens.

Due to the significance of this research, the researcher intends to publish these findings as chapters in books and in international journals, aimed at audiences of different cultural backgrounds in many different sectors. Its results can be incorporated into strategies such as preventing and measuring email problems in separate departments in companies, evaluating and developing email communication, providing training in the avoidance of norm violations, and reducing the affective and behavioural reactions to norm violations. As well as being extremely useful to business consultants, both in relation to email communication, as well as regarding issues such as employee engagement, burnout, business management and cultural intelligence, there is no doubt that the information provided by this research will be of benefit to many sectors worldwide, such as business, higher education and health care, and it will be particularly useful for the organisations in which the data was collected. It is hoped therefore that this research, which has identified the significance of email norm violation and the factors which can influence it, will make a valuable contribution to both the development of research and practice relating to this important issue.

Furthermore, the significant effects of culture and work status on recipients varying reactions to the email violation made apparent in this research (i.e. not responding with 100% compliance to the email request, but reporting high tendencies to move away or move against the email sender) indicate the need for training courses in intercultural communication, cultural competence and professional email communication etiquette to increase the benefits of working effectively within and across cultures. For example, the research indicates the importance of making email senders aware of the significance of (a) the email contact including correct editing and respect language, and (b) recognition that the social information that they provide in their email request (e.g. work status and cultural background) in influencing recipients' reactions towards their request in relation to the email recipient's email communication norms, work status, cultural background, and

additional moderating factors such as recipients' global identity, local identity, organisational and dispositional trust.

To achieve this, the following programme could be designed to enhance interpersonal and intercultural communication and social relationships amongst employees from different groups, status levels and cultural backgrounds in the workplace, by providing intercultural training, specific to communicating with others via email.

#### **8.5.2 Email intercultural communication and cultural competence training programme**

Effective intercultural communication depends on multiple factors. Globalised communications and multicultural working environments make it harder for individuals to assure their email is appropriate and received positive amidst increasing workplace diversity. The proposed training would be tailored to each occupational sector who were included in this study (i.e. higher education, healthcare and international business), and could be delivered in English or Arabic, as required. In addition, the training programme would be designed so that it could be presented in person by the trainer (in vivo) and online.

- *Workshop training option*

The benefits of in vivo training are that the trainer can lead discussion amongst the trainee delegates during the presentation. A limitation would be logistics, such as the costs of hiring a training room; specific locations may increase travel time and/or time away from work duties for both delegates and the trainer.

- *Online training option*

A benefit of online training format is its convenience and flexibility. People who work and students are generally busy, hence staff/students may not be able to take time off work/lectures to attend a training programme in person. Online training is an eminently practical and convenient solution. Trainees can watch all or parts of the training before/after work/lectures in privacy (which is of additional benefit for shy people), absorb the material over several sessions and have time to digest the material and really think about it. A limitation of online training is potential technical difficulties (e.g. the need to tailor training for desktop/laptop, tablet and smartphone platforms and capabilities).



#### 8.5.2.1 Steps in email intercultural training workshop (in vivo or online)

- *Part 1 – present background and study findings*

1. Provide delegates with an overview of the potential issues involved in email communication in multicultural, intercultural and virtual work settings of diversity and summarise implications of how social information provided about email senders and violations of email communication norms in email messages can reduce positive reactions to an email request.
2. Explain the impact of violating email communication norms on the email recipient. Define what email violation is (e.g. breach of email etiquette and/or technical errors). Present some examples to delegates of an email violation (e.g. onscreen/ PowerPoint slides), and ask them if they can spot the email violation errors, in order to encourage some interactive discussion amongst delegates and trainer about what they recognize as email violation, exploring their similar or contrasting experiences and perceptions of violations.
3. Next explain how social information about the email sender can influence the email recipients' reactions to email violation. Start by asking delegates what information about an email sender's identity they look for in an email (to determine who the sender is in terms of in-group or outgroup perceived affiliation). The trainer would ask delegates how this information about the sender would affect their reaction, to prompt discussion. The trainer would then share findings from the present study on how an email sender's work status and cultural background increased or decreased recipients' reactions to the email request.
4. Next the trainer would present an illustrative model of the study outcomes, and show the factors which mediated and moderated how recipients reacted to email violation. The trainer would discuss how recipients' emotional reactions and liking towards the sender influenced their tendency to comply with, move away from, or move against the sender.

- *Part 2 – session on how to improve intercultural email communication*

Part 2 of the training would involve teaching delegates how to improve intercultural email communication by teaching appropriate email etiquette, impression management, how to manage the social information they provide and be aware of its potential effect on recipient appraisal; how to regulate their affective reactions; and explaining the consequences of each behavioural tendency (i.e. implications of compliance, move away from or move against an email sender). The

session would also cover trust issues, and the importance of dispositional trust (particularly in diverse workplace environments) and conclude with cultural competence training to develop cultural knowledge, awareness, sensitivity and competence in intercultural email communication. The following specific sessional objectives have been formulated:

- (a) Teach delegates appropriate email etiquette in general, and across cultures.
- (b) Teach increasing mindfulness (conscious awareness) about the social information they provide in their emails when making requests.
- (c) Teach delegates how to be mindful about their own affective reactions, and their behavioural reactions, when email sender is unknown.
- (d) Teach delegates how to consider possible reasons for the email violation, emphasising that such aberrations are not always deliberate (to help reduce negative reactions). For example: (1) the sender is foreign → they may have limited vocabulary in recipients' language; (2) foreign sender may be unaware of local email communication norms; (3) the sender may have time-pressure → the email was rushed and not edited/corrected; (4) the sender is immature and has not learned appropriate professional email communication norms. Therefore, the trainer would teach delegates how to react with more tolerance, and accordingly consider numerous cultural, status and other factors that may have caused the sender's violation, and learn how to respond more positively (to at least comply with the sender to maintain the relationship). Move against may continue the email relationship by provoking further response from the sender, but the relationship may become confrontational, thus the trainer would explain the consequences of this negative behavioural reaction. Similarly, move away signals an end to the email relationship if the recipient does not respond to the sender's request. The trainer would explain these consequences to delegates, and that move away should only be used as a last response in the case of receiving an extreme email violation (where the violation borders on verbal abuse).
- (e) Highlight importance of dispositional trust in intercultural email communication. Multiple studies highlight that trust is a crucial factor in establishing trust in online relationships (Erez et al., 2013; Jarvenpaa et al., 2004; Roy & Ghose, 2005). Study 2 highlighted the higher importance of dispositional trust (than organizational trust) in moderating affective and behavioural reactions to perceived email violation, and the way to build trust to

enhance email communication outcomes should be explained. Trust is a major issue in email communication for several reasons, including that visual and non-verbal information cues are generally absent in email communication, thus removing the most fundamental instinctual communication cues in how we perceive others and assess their trustworthiness, and that online communication involves deindividuation, as explained by the SIDE model (Postmes et al., 1998), as the recipient is not perceived as an individual, but as part of a group. Recipients trust members of perceived in-group more than outgroup according to social identity theory (Tajfel & Turner, 1979). Furthermore, cultural background and work are also salient factors in-group/outgroup perceptions of similarity and hence trustworthiness. The trainer would present findings from the present study on the impact of dispositional trust and explain how email recipients who have 'trust issues' in online communication with unknown senders, are more likely to have negative affective and behavioural reactions, as a result of which they do not achieve the desired outcomes. People with trust issues tend to be defensive, require certainty, fear taking risks, and in email communication may make negative attributions about the sender who they perceive to be from an out-group (e.g. different culture/lower status). The trainer would explain that in relation to trust in email communication we can never have 100% certainty; to some degree we are vulnerable, and need to take sensible risks (e.g. taking the risk to comply with the email sender, regardless of email violation, rather than move away/move against). In an increasingly multicultural organisational diversity, trust is now recognised as a key element of intercultural email communication. Effective trust across cultures requires awareness and appreciation of diversity, as well as intercultural awareness, which is key part of cultural competence.

- (f) Cultural competence training: The development of cultural awareness, cultural sensitivity, cultural knowledge and cultural competence (Carpenter, 2016) would increase the ability of email recipients to interact and react appropriately and effectively to various perceived out-groups in a 'culturally competent' and respectful manner towards senders of any work status or cultural background. Cultural competence training would help delegates to overcome automatic negative stereotypes formed towards email senders of different work status or different cultural backgrounds to them, and learn how to respond professionally to the sender, regardless of email violation and moderated reactions towards sender's diversity (e.g. culture/status).

(g) Global identity: For international business delegates.

The programme could be designed for staff whose work involves delivery of email to culturally diverse groups, and also to managers, human resource professionals and students. The methods of delivery and learning described above could include lectures, presentations, case studies, research findings, audio visual material, group discussion and interaction and practical exercises.

#### *8.5.2.2 Objectives*

Upon completion of the in vivo or online training, delegates would have enhanced email communication knowledge and skill in the context of diversity, enabling them to confidently communicate with people of diverse backgrounds and overcome the significant moderating and mediating effects of their initial affective reactions and attributions, modifying their behavioural reactions to increase the tendency to comply with the sender's request or seek further information from the sender. This would help to reduce the challenges of communicating in multicultural and global business environments increasingly defined by diversity. In addition, increasing understanding and appreciation of diversity and cultural differences within and across organisations can help develop stronger intercultural relationships, improve the quality of communication and promote greater trust and confidence, all of which increase the likelihood of greater tolerance towards email violation and reacting more positively to achieve desired outcomes.

#### *8.5.2.3 Pilot programme at the university and obtain participant feedback*

The programme could be piloted at a target university (in both UK and Saudi) to determine its effectiveness and gain feedback from delegates. For example, a small sample of delegates from both UK and Saudi interviews could be interviewed after the training intervention to identify what aspects of the intervention they liked, found helpful, whether they would recommend the training programme to colleagues/classmates and suggestions for improvement.

The programme could then be revised based on participant feedback, and developed into a package of workshop and online training programmes tailored to the higher education sector, healthcare, and international businesses, as well as being used in further research interventions.

### **8.6 Recommendations for Future Research**

Clearly, as a priority, more extensive research within a wider selection of organisations in many other sectors is required to evaluate the effects of email norm violation in order to establish the extent of the problem and to be better able to address the issue and develop further

recommendations for email communication training and practice. There is a major need for researchers around the globe to collaborate on large-scale cross-cultural email violation studies, as with increasing globalisation and internet communication superseding all other forms, it is vital that social and organisational psychologists develop an expert body of evidence in this area, as it has the potential to make a valid and valuable contribution to both theory and working relationships in practice.

This present study assumed that the email sender is unknown to the email recipient, who must try to discern the identity of the sender, based on the social information cues provided (which they use to categorise the sender as in-group/outgroup). Therefore, the findings may only apply to reactions to an unknown sender, as reactions may be very different if the sender is already known. This warrants further experimental research.

The present study also assumed that the affective reactions that mediated the behavioural reactions to perceived email violation were not modified by any external factors (such as a third party/colleague) in Study 1 and Study 2. However, it is possible that an individual might receive a perceived email violation and share their affective reactions with others at work (emotional venting, which is a coping strategy designed to relieve the pressure of negative emotional reactions), which might increase or decrease the level of affectedness. Depending on any feedback or advice they receive, the recipient may feel more relief. Their colleagues may be more objective, and be able to provide possible reasons why the email violation occurred (e.g. the sender is from a different culture and does not know the appropriate forms, or the sender is busy and rushed the email, or the sender is immature and thus less professional etc.). This hypothesis warrants further experimental research, but would require an *in vivo* study in real-life contexts, involving the researcher creating such a scenario and observing and recording the impact of a third-party (colleague) potentially influencing (moderating) an email recipients' emotional and behavioural reactions.

This study also has high relevance to another occupational sector of self-employment and developing entrepreneurs, including freelancers, consultants and small/medium enterprises (SMEs), as these individuals/businesses rely heavily on email technology to communicate with their potential customers and clients. They also frequently serve a diverse clientele, including various cultural backgrounds and work status groups. Their business often relies heavily on forming a good impression in their email (i.e. the social information they provide and their email

content). Therefore, email violation may negatively affect potential/client relationships and result in loss of business/reputation. This justifies the need to replicate this research on this occupational sector, by adapting the research model used in Study 2 in this thesis, which is more relevant for business.

In addition, future research should test whether these findings, which relate only to email communication, extend and can be applied to other types of CMC, for example in the context of text-based messages, which are used by some companies when communicating with customers. Furthermore, there may be differences in perception and reaction when using asynchronous communication forms rather than synchronous media, as the former allows more time for editing and there may be other types of deviations which may influence the perception of norm violations and reactions towards the message and the sender, which could be identified in future research, with the aim of finding ways to reduce their effects.

Moreover, it would seem important to take this research beyond academia into real organisational behaviour in practice, showing how the findings could be modified in future employee email communication training, using real-time experimental email scenarios, involving receiving a real email containing a violation of communication norms, and measuring how recipients actually react behaviourally, rather than just their intention, in order to move beyond presenting 'email violation vignettes' embedded within questionnaires. Such research could be conducted in a laboratory setting, and affective reactions could be measured physiologically/ neuropsychologically, as the technology in research is now available to move beyond measuring attitudes to measuring affective reactions as they occur in the body. An additional behavioural outcome of reaction time in seconds could also be used to see how long it takes participants to respond to an email violation, and whether reaction time differs based on the status/culture moderators, and planned behavioural reactions.

Status is clearly a problematic issue within current society, and future research in email communication in higher education establishments should address complex status relationships within email communication, such as the relationship between students and lecturers and including additional 'lower status' samples of those employed in universities. Future research could also consider moderating variables other than status and culture, such as the email sender's gender or age, and examine if providing other information about the communication partner's situation

reduces negative perceptions, as well as generally exploring the myriad emotional and behavioural reactions stemming from email violations.

Clearly a multitude of emotions leading to positive and negative effects can be explored by future research, which should therefore measure the balance of positive and negative outcomes, as well as neutral responses, to give a more accurate picture of the many emotional responses there may be. The Positive and Negative Affect Scale (PANAS) by Watson et al. (1988) might be a useful measure for this purpose. It would also be worth researching whether higher status recipients have different emotional reactions to email violation compared to lower status ones, and also investigating what emotions they infer the sender has, which may influence their own response. As already indicated, resentment is another important emotion that might be important to research, when exploring emotional responses to email norm violations. Other variables would also be useful to explore, particularly trustworthiness as a mediator of the reaction to email communication, as well as global/local identity constructs, as it appears that these have more significance than culture issues in the international business sector. Regarding behavioural reactions, future research should consider the 'delayed reply' as a reaction to email norm violations.

Regarding personality traits, it is important that future research should be extended to examine the moderation effects of all Big Five personality traits of the receivers on their reactions to email communication. The trait of agreeableness in particular seems worthy of exploration, as it appears to have a high influence on responses in interpersonal communication. Similarly, the trait of openness seems significant, as it seems to have more in common with the factor of global identity; for example, when email users are more tolerant of diversity, this can result in a more sophisticated understanding of status and cultural differences.

It would also be useful to use a different measure of personality more aligned with current research in organisational psychology, such as MBTI, 16pf or dark triad of personality. Alternatively, the ten-item big-five inventory (Gosling et al., 2003) is a short measure of the five factor personality and other measures such as the 60-item NEO five-factor inventory (Costa & McCrae, 1992), or the 50-item short version of the International Personality Item Pool (Goldberg, 1999), which is considered to be reliable and valid (John & Srivastava, 1999), could also be considered.

In conclusion, a major implication from the study findings is the sense of unease that arises when composing an email, which was previously considered to be a straightforward functional task in

modern professional contexts. The findings from these studies have shown that email communication is actually influenced by multiple factors affecting how the sender is perceived and how the recipient reacts. These findings show the need for all professionals to be mindful of how they compose an email, and how they react to any perceived violation in an email received, as both could have negative effects on desired outcomes. As email communication dynamics are actually highly complex, according to these study findings this highlights the need to train professionals across all organisational sectors in appropriate email etiquette and to control any negative emotional and behavioural reactions towards a perceived email violation, which may be harmful to professional inter-group relationships and outcomes. The evidence provided by this study in the field of how email norm violations are influenced by different factors significantly contributes to previous research, and there is no doubt that it will facilitate inter-disciplinary and cross-cultural collaborations in higher education, healthcare and business fields by improving email communications in university, healthcare and business organizations.



**STATUS AND CULTURE MODERATE EMOTIONAL AND  
BEHAVIOURAL REACTIONS TO EMAIL NORM VIOLATIONS IN  
HIGHER EDUCATION, HEALTHCARE AND INTERNATIONAL  
BUSINESS:  
A CROSS CULTURAL STUDY**

**by**

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## Appendix A: Glossary of Terms

**Affective responses:** Emotional responses in this research are defined as the feelings of happiness, sadness, anger, worry, guilt and liking after reading the email message. Recent research by Fineman (2008) has suggested a significant impact of emotions in the organisation and so their effects are worthy of investigation. E-mail norm violations are likely to produce a strong emotional reaction (Vignovic & Thompson, 2010).

**Attributions** (i.e. external and internal): is the process by which individuals explain the causes of behaviour and events (Kassin, 2008; Sanderson, 2010). Electronic messages can convey impressions about the sender and lead to differing attributions (Lea & Spears, 1992; Vignovic & Thompson, 2010). These attributions can be internal (behaviour caused by internal reasons) or external (behaviour caused by external reasons).the email sender in this research will be targeted for the internal or external attributions.

**Behavioural reactions** (outcome variable): Mackie et al. (2000) made a connection between appraisal theory and emotional and behavioural reactions to in-group and out-group. People appraise each other as in-group and out-group. When a recipient reads an email, they immediately appraise and categorise the sender as in-group or out-group, based on the social information provided about the sender. This will affect their reaction. According to Mackie et al. (2000), by far the most important consequence of emotional reactions is their influence on behaviour. According to Frijda, Kuipers, and ter Schure (1989), particular emotions have a stronger influence on our motivation to act (e.g. anger, worry, sadness, happiness, liking). Mackie et al. (2000) proposed three behavioural tendencies that emotions mediate: (1) Compliance, which is the willingness of the email recipient to comply with the sender's request (Stephens et al., 2009); (2) moving Away, which is the inclination of the email recipient to ignore the email sender; and (3) moving Against, which is inclination of the email recipient to confront the email sender (Mackie et al., 2000).

**Computer mediated communication:** Thurlow et al. (2004, p. 83) defined computer-mediated communication CMC as "communication that takes place between human beings via the instrumentality of computers," including the communication process that occurs "via a computer terminal and a communication network such as the Internet" (Alexander et al., 2006, p. 241).

**Cultural differences:** Include collectivism/individualism, high or low power distance, for instance (Hofstede, 1980). Individualism and collectivism are cultural dimensions that we rely on to differentiate amongst people of specific cultures (Triandis, 2003). Individualism and collectivism can be distinguished through four features (Triandis, 1995): self, aims, relationships, and determinants of actions. Individualists tend to be self-independent, have personal aims, and enhance personal relationships.

**Cultural norms:** Defined by Moser and Axtell (2013, p.4) as "expressions of shared values and beliefs in a specific culture which consequently shape attitudes, behaviours, and expectations of what is appropriate in a given situation within a specific cultural context".

**Culture:** Cultural background was defined by Triandis (1997) as a "shared set of beliefs, attitudes, norms, values, and behaviour organized around a central theme and found among speakers of one language, in one time period, and in one geographic region" (p. 443). In this research, "culture" refers to national/ethnic cultural background, and not organisational culture. The email sender's cultural background was manipulated in this research by revealing information that the email sender was from the same or a different cultural background. It is expected that the individuals from both cultural backgrounds (in UK and KSA) would vary in their affective and behavioural reactions according to the information they receive about the cultural background of the email sender.

**Dispositional trust:** Described as “a consistent tendency to be willing to depend on others across a broad spectrum of situations and persons” (McKnight, Cummings, & Chervany, 1998, p. 477). Propensity to trust is regarded as a trait that indicates to a generalized expectation about the trustworthiness of others (Mayer et al., 1995). Propensity might be assumed of as the general willingness to trust other individuals (Mayer et al., 1995). Propensity to trust which can be also called disposition to trust (Robert, Dennis, & Hung, 2009) is a “generalized attitude” learned from both personal experience and through observed behaviour of parents (Rotter, 1967).

**Emotionally unstable (neurotic):** People overly concerned with details. They tend to be tense and moody, and worry more than others (Jacques et al., 2009). Emotional stability is on a continuum, so the opposite emotionally stable people tend to be confident, positive, and resilient, and not easily affected by stress or anxiety as emotionally unstable people.

**Extroverts:** Talkative, emotionally expressive, and lively. They form relationships easily and have many friends (Jacques et al., 2009). Extraversion includes traits such as assertiveness, sociability, activity, cheerfulness (Trapmann et al., 2007) and positive emotions (McCrae, 2002). Introversion is considered the opposite to extraversion, on a continuum. Introverts tend to be less communicative, more independent, more solitary, and less emotionally expressive and reserved.

**Global identity:** Individuals perceive a sense of belonging to a global culture by adopting particular practices and styles relating to that culture (Arnett, 2002; Erez & Gati, 2004). A stronger global identity will lead to more shared norms and values among individuals (Glikson & Erez, 2013).

**Local identity:** The belonging or identifications with the national community in which an individual was born and grown up (Drori, Hollerer, & Walgenbach, 2014). Shokef and Erez (2006) indicated that local identity tightens the acceptance of cultural verities, leading to classifying individuals of the same culture as the in-group and individuals of other cultures as the out-group.

**Norm violation:** Levine et al. (2000) propose that norm violations occur when people behave in an unacceptable manner or in a way that is unsuitable to the communication context. In this research, perceived violation perception is expected after reading an email in the questionnaire containing grammatical errors and informality, for example, informal term of address, shortcut (e.g. how r u, for how are you?), spelling error, number substitution (e.g. b4 for before), incomplete sentence, and informal sign-off (“cheers”).

**Organisational trust:** Defined as “a psychological state comprising willingness to accept vulnerability based on positive expectations of an organisation” (Fulmer & Gelfand, 2012, p.1174).

**Personality traits:** Conventionally defined by Markus and Kitayama (1998) as comparatively stable or noticeable variations in feelings, thoughts and behaviour. The Big Five personality traits may manifest themselves differently in each set of participants (McCrae & John, 1992). The five factors are extraversion, agreeableness, conscientiousness, neuroticism and openness. This research is only assessing extraversion and emotional stability (neuroticism).

**Power distance:** One of the four dimensions of national culture identified by Hofstede (1980) distinguishing lower power distance from higher power distance culture. Power distance is defined as “the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally” (Hofstede, 2001, p. 98). In other words, the existence of social inequality as demonstrated by the comparative percentages of people who opt for consultative leadership as opposed to autocratic or directive leadership amongst others. High power distance can exist with social norms of unequal hierarchy. Inferiors

view superiors as different from them. People take advantage of power as much as they can, and people from high power distance cultures expect that different degrees of power should influence behaviour (Hofstede, 2001).

**Status:** Defined as the position of an individual in relation to other people regarding professional or social standing (Sproull & Kiesler, 1986). In this research, status is defined as the position of an individual in relation to other people, for instance a student and lecturer in the higher education sector, or doctor and nurse in the healthcare sector. The email sender's status was manipulated in this research by revealing information that the email sender was from the same/lower/higher status. It is expected that the individuals from different status in both cultural backgrounds in the UK and the KSA would vary in their affective and behavioral reactions according to the information they receive about the email sender status.

**Trust:** Can be defined as the "willingness to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p. 712).

## **Appendix B: Study Documents**

### **B1: Study 1 Questionnaire**

**Email communication in higher education: An intercultural comparison study between Saudi Arabia and the United Kingdom.**

#### **Calling all ACADEMICS!**

If you are interested in how people communicate by email, please read on...

You are invited to take part in an exciting new study about email communication in higher education, which is part of my thesis for my PhD Degree in Organisational Psychology.

Email is increasingly used amongst organisations such as universities because it ensures good services for students and staff and facilitates intra-organisational cooperation. This intercultural comparison study in email communication amongst university staff and students from different cultural backgrounds aims to look at the conditions for successful electronic communication. It can also help improve communications via email amongst universities and develop international collaboration in higher education.

Participation is through a paper survey and takes about 15 minutes. The information you provide will be treated in confidence by the investigator, and your identity will be fully protected in the publication of any findings.

#### **Ethics Information**

This study has been approved by the Ethics Committee at the University of Roehampton London. Your participation is voluntary and you are free to withdraw at any time. If you have any further queries, please contact:

The PhD researcher

**Atiah Almaleky**

almaleka1@roehampton.ac.uk

The research supervisor

**Dr. Karin Moser**

K.Moser@roehampton.ac.uk

## Survey about email communication in higher education

**A. Please answer these questions about some personal information. Please use (✓)**

1. Age

	years
--	-------

2. Gender

Male	
Female	

3. Ethnicity

White (British)	
White (Other)	
Indian	
Pakistani	
White Irish	
Mixed Ethnicity	
Black Caribbean	
Black African	
Bangladeshi	
Other Asian (Non-Chinese)	
Saudi	
Chinese	
Black (Other)	
Other (please specify)	

4. Nationality

British	
Other (please specify)	

5. Which faculty/subject area are you in?

Arts and Humanities	
Engineering	
Medicine, Dentistry and Health	
Pure Science	
Social Sciences	
Other (please specify)	

6. What is your current position?

Full Professor	
Associate Professor	
Assistant Professor	
Reader	
Senior lecturer	
Lecturer	
Other (please specify)	

7. How many years have you been working as an ACADEMIC?

	years
--	-------

8. Were you born in Britain?

Yes	
No	



9. IF NOT, how long have you been living in Britain?

years
-------

10. If you are not British and your country's sports team played against Britain, which team would you support?

I would support <b>The British sports team</b>	I would support <b>My country's sports team</b>

11. Which culture do you identify most with?

British	Other (please specify)

12. Are you a native English speaker?

Yes	
No	

13. IF NOT, how good is your English?

Beginner	
Intermediate	
Fluent	

**B. These questions relate to your identity as an ACADEMIC.**

1. Please answer these questions in relation to your identity as an ACADEMIC.

N	Statements	Absolutely Not	Slightly	Somewhat	Moderately	Absolutely
1	Being an ACADEMIC is a key aspect of who I am					
2	I identify with other ACADEMICS					
3	Being an ACADEMIC means a lot to me					

**C. These questions relate to your use of email and social media.**

1. How many emails would you send on a typical day?

2. Please rate how frequently you use the following social media systems, use (✓) only:

N	Social media	Never	Less than one a month	Monthly	Weekly	Daily	Very frequently (several times a day)
1	Email						
2	Mobile phone texting						
3	Facebook						
4	Skype						
5	Twitter						
6	Instant messenger						
7	WhatsApp						
8	Other (please specify).....						

**D. These questions relate to your social values.**

Please rate the statements below, use (✓) only:

N	Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	Being accepted as a member of a group is more important than having autonomy and independence.					
2	Being accepted as a member of a group is more important than being independent.					
3	Group success is more important than individual success.					
4	Being loyal to a group is more important than individual gain.					
5	Individual rewards are not as important as group welfare.					
6	It is more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiative.					
7	Managers should make most decisions without consulting subordinates.					
8	Managers should not ask subordinates for advice, because they might appear less powerful.					
9	Decision making power should stay with top management in the organization and not be delegated to lower level employees.					
10	Employees should not question their manager's decisions.					
11	A manager should perform work which is difficult and important and delegate tasks which are repetitive and mundane to subordinates.					
12	Higher level managers should receive more benefits and privileges than lower level managers and professional staff.					
13	Managers should be careful not to ask the opinions of subordinates too frequently, otherwise the manager might appear to be weak and incompetent.					

### E. Email Reaction Questionnaire

You have received the following email from a STUDENT / an ACADEMIC COLLEAGUE who has the SAME / a DIFFERENT CULTURAL BACKGROUND AS YOU.

Hi

How r u? i'm working on a research project you might be interested in. Free 2 dicsus that together next Monday?

Cheers!

These questions are in relation to your reaction to the STUDENT's/ the ACADEMIC COLLEAGUE's EMAIL.

1. Please rate the EMAIL you just read on the following aspects, use (✓) only:

N	Email aspects	Completely unacceptable	Unacceptable	Uncertain	Acceptable	Completely acceptable
1	Address					
2	Shortcuts					
3	Message Length					
4	Language					
5	Content					
6	Formality					
7	Spelling					
8	Sign-off					
9	Other .....					

2. Please rate how you felt EMOTIONALLY after reading the email, use (✓) only:

N	Emotions	Absolutely Not	Slightly	Somewhat	Moderately	Absolutely
1	Happy					
2	Delighted					
3	Distressed					
4	Annoyed					
5	Outraged					
6	Guilty					
7	Embarrassed					
8	Remorseful					
9	Ashamed					
10	Afraid					
11	Sad					
12	Alarmed					
13	Pleased					
14	Worried					
15	Angry					
16	Depressed					
17	Amused					

**3- Please answer these questions in relation to the STUDENT's /COLLEAGUE's REQUEST in the email, use (✓) only:**

How willing would you be to comply with the STUDENT's /COLLEAGUE'S request, and SIMILAR requests in future?

How willing would you be to comply with the STUDENT's /COLLEAGUE'S request and SIMILAR requests in future?	Very unwilling	unwilling	Uncertain	Willing	Very willing
Right now					
In future					

In relation to the STUDENT/COLLEAGUE, please rate to what extent you want to:

N	Actions	Not at all	Slightly	Somewhat	Moderately	Very much
1	Confront them					
2	Oppose them					
3	Argue with them					
4	Avoid them					
5	Have nothing to do with them					
6	Keep them at a distance					

**4- Please answer these questions in relation to the STYLE of the EMAIL you just read use (✓)**

1. The style of the email was more likely caused by:

The sort of person the STUDENT/COLLEAGUE is	
The situation the STUDENT/COLLEAGUE was in	

2. The style of the email was more likely:

Manageable by the STUDENT/COLLEAGUE	
Not manageable by the STUDENT/COLLEAGUE	

3. The style of the email was more likely caused by:

Something inside of the STUDENT/COLLEAGUE	
Something outside of the STUDENT/COLLEAGUE	

4. The style of the email was more likely:

Something over which the STUDENT/COLLEAGUE had control	
Something over which the STUDENT/COLLEAGUE had no control	

5. The style of the email was more likely:

A result of the STUDENT'S /COLLEAGUE'S ability	
A result of the STUDENT'S /COLLEAGUE'S situation	

**5- These questions are in relation to your perception of the STUDENT/COLLEAGUE.**

1. To what extent do you think the following descriptions apply to the STUDENT/COLLEAGUE?

N		Never	Little	Somewhat	Much	A great deal (much more than most people)
1	Warm					
2	Trained					
3	Responsible					
4	Rushed					
5	Lazy					
6	Intelligent					
7	Has goodwill					
8	Free from Inhibitions					
9	Lively					
10	Self-confident					
11	Empathic					
12	Trustworthy					
13	Dominant					
14	Flexible					

N		Never/not at all	Little	Somewhat	Much	A great deal (much more than most people)
15	Aware of Technology					
16	Competent					
17	Original					
18	Time -pressured					
19	Verbally fluent					
20	Assertive					
21	Has inner strength					
22	Attractive					
23	Stressed					
24	Relaxed					
25	Aware of commerce					

2. Please answer these questions. Use (✓) only

N		Never/not at all	Little	Somewhat	Much	A great deal (much more than most people)
1	To what extent would you like the STUDENT/COLLEAGUE?					
2	To what extent would you enjoy working with the STUDENT/COLLEAGUE?					
3	How FAMILIAR the STUDENT/COLLEAGUE is likely to be to you?					

**Thank you for participating in the study by answering this questionnaire.**

If you have any comments about this study, please feel free to make them here:

.....

.....

.....

.....

.....

.....

.....

.....

You can request for your data to be withdrawn at any time after participation in the study. In order to do this, please contact the investigator with your participant ID number.

Please write six characters to be your ID number:

--	--	--	--	--	--

---

## B2: Study 2 Questionnaire

*Survey about email communication in international companies*

Thank you for agreeing to participate in this study. Please answer all questions. There is no right or wrong answer. You should try to answer as truthfully as possible.

### Part 1 – Demographic Information

In the following section we ask for some general demographic information about yourself

**Age**

	years
--	-------

**Gender**

Male	
Female	

**Nationality**

--

**How would you define your ethnicity?**

White	
Black	
Indian	
Chinese	
Asian (Non-Chinese)	
Arab	
Mixed	
Other (please specify)	

**What is the highest degree of education you have completed?**

Less than high school	
High school graduate (or equivalent)	
Some college, no degree	
Diploma	
Bachelor's degree	
Master's degree	
Ph.D.	
Vocational or professional degree	
Other qualification (please specify)	

**Which region are you working in?**

Africa	
Asia	
Central America and Caribbean	
Europe	
North America	
Oceania	
South America	
Other (please specify)	

**Which is your current country of residence?**

--

**Were you born in this country?**

Yes	
No	

**If NOT, how many years have you been living in this country?**

	years
--	-------

**Which culture do you identify most with?**

--

**Are you a native English speaker?**

Yes	
No	

**IF NOT, how good is your English?**

Beginner	
Intermediate	
Fluent	



## Part 2 – Professional Information

Which of the following categories best describes the primary area of your current employment?

Hotel Services	
Oil, Chemical & Gas Industry	
Water & Power	
Other (please specify)	

Which area(s) are you mainly working in?

Administration	
Customer Service	
Engineering	
Finance	
Human Resources (HR)	
Information Technology (IT)	
Insurance	
Inventory	
Licenses	
Maintenance	
Marketing	
Operations	
Production	
Projects	
Purchasing	
Quality Assurance	
Research & Development (R&D)	
Sales	
Security	
Services	
Other (please specify)	

Which of the following best describes your role at work?

Upper management	
Middle management	
Junior management	
Supervisor	
Administrative staff	
Support staff	
Trained professional	
Skilled labourer	
Consultant	
Temporary employee	
Researcher	
Trainee	
Other (please specify)	

**Are you supervising other employees?**

Yes	
No	

**If YES, how many employees are you supervising?**

	people
--	--------

**How many years have you been working for your current employer?**

	Years
--	-------

**Are you working full time?**

Yes	
No	

**If NOT, how many hours per week do you work?**

	hours per week
--	----------------

**Please answer these questions in relation to your professional identity.**

N	Statements	Absolutely Not	Slightly	Somewhat	Moderately	Absolutely
1	Being in my current profession is a key aspect of who I am					
2	I identify with other people from the same profession					
3	Being in my current profession means a lot to me					

### Part 3- Use of Email and Social Media

Approximately how many emails do you send on a typical day? .....

Approximately how many emails do you receive on a typical day? .....

**Please rate how frequently you use the following social media, tick all that apply:**

N	Social media	Never	Less than one a month	Monthly	Weekly	Daily	Several times a day
1	Email						
2	Mobile phone texting						
3	Facebook						
4	Skype						
5	Twitter						
6	Instant messenger						
7	WhatsApp						
8	LinkedIn						
9	Other (please specify).....						

**The following email is an important part of the study, so please read carefully:**

**Imagine you have received the following EMAIL from a person who has the SAME PROFESSIONAL STATUS, and the SAME CULTURAL BACKGROUND as you.**

Hi

How r u? i'm working on a project you might be interested in. Free 2 discsus that together next Monday?

Cheers!

**1. Please indicate how acceptable you found the following EMAIL aspects:**

N	Email aspects	Completely unacceptable	Unacceptable	Uncertain	Acceptable	Completely acceptable
1	Salutation/Greeting					
2	Shortcuts					
3	Message Length					
4	Language					
5	Content					
6	Formality					
7	Spelling					
8	Sign-off					
9	Other aspect .....					

**2. Please rate how you felt EMOTIONALLY after reading the EMAIL:**

N	Emotions	Absolutely Not	Slightly	Somewhat	Moderately	Absolutely
1	Happy					
2	Delighted					
3	Distressed					
4	Annoyed					
5	Outraged					
6	Guilty					
7	Embarrassed					
8	Remorseful					
9	Ashamed					
10	Afraid					
11	Sad					
12	Alarmed					
13	Pleased					
14	Worried					
15	Angry					
16	Depressed					
17	Amused					

**3. How willing would you be to comply with the EMAIL SENDER'S request and SIMILAR requests in future?**

How willing would you be to comply with the EMAIL SENDER'S request and SIMILAR requests in future?	Very unwilling	unwilling	Uncertain	Willing	Very willing
Right now					
In future					

**4. What action would you take in response to the EMAIL you have just read?**

N	Actions	Not at all	Slightly	Somewhat	Moderately	Very much
1	Confront them					
2	Oppose them					
3	Argue with them					
4	Avoid them					
5	Have nothing to do with them					
6	Keep them at a distance					

**5- Please answer these questions in relation to the STYLE of the EMAIL you just read:**

1. The style of the email was more likely caused by:

The sort of person the SENDER is	
The situation the SENDER was in	

2. The style of the email was more likely:

Manageable by the SENDER	
Not manageable by the SENDER	

3. The style of the email was more likely caused by:

Something inside of the SENDER	
Something outside of the SENDER	

4. The style of the email was more likely:

Something over which the SENDER had control	
Something over which the SENDER had no control	

5. The style of the email was more likely:

A result of the SENDER's ability	
A result of the SENDER's situation	

**6- These questions ask about your perception of the EMAIL SENDER.**

1. To what extent do you think the following descriptions apply to the EMAIL SENDER?

N		Never	Little	Somewhat	Much	A great deal
1	Warm					
2	Trained					
3	Responsible					
4	Rushed					
5	Lazy					
6	Intelligent					
7	Has goodwill					
8	Free from Inhibitions					
9	Lively					
10	Self-confident					
11	Empathic					
12	Trustworthy					
13	Dominant					
14	Flexible					
15	Aware of Technology					

1. To what extent do you think the following descriptions apply to the EMAIL SENDER?

N		Never	Little	Somewhat	Much	A great deal
16	Competent					
17	Original					
18	Time -pressured					
19	Verbally fluent					
20	Assertive					
21	Has inner Strength					
22	Attractive					
23	Stressed					
24	Relaxed					
25	Aware of Commerce					

2. The following questions ask about your liking and familiarity with the email sender

N		Never/not at all	Little	Somewhat	Much	A great deal
1	To what extent would you like the SENDER OF THE EMAIL.?					
2	To what extent would you enjoy working with the SENDER OF THE EMAIL?					
3	How FAMILIAR is the SENDER OF THE EMAIL likely to be to you?					

#### Part 4 – General values and attitudes

The section asks about general values and attitudes that might play a role at work.

**1. The following statements contains phrases describing people's behaviours. Describe yourself as you generally are now, not as you wish to be in the future.**

N	Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree
1	<i>I see myself as:</i> extraverted, enthusiastic.					
2	<i>I see myself as:</i> critical, quarrelsome.					
3	<i>I see myself as:</i> dependable, self-disciplined.					
4	<i>I see myself as:</i> anxious, easily upset.					
5	<i>I see myself as:</i> open to new experiences, complex.					
6	<i>I see myself as:</i> reserved, quiet.					
7	<i>I see myself as:</i> sympathetic, warm.					
8	<i>I see myself as:</i> disorganized, careless.					
9	<i>I see myself as:</i> calm, emotionally stable.					
10	<i>I see myself as:</i> conventional, uncreative.					

**2. Please rate the following statements about your sense of belonging:**

N	Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	I see myself as part of the global international community					
2	I feel a strong attachment towards the world environment I belong to					
3	I would define myself as a citizen of the global world					
4	I relate to people from other parts of the world as if they were close acquaintances/associates					
5	I feel a strong attachment towards people from all around the world					
6	I see myself as part of my community					
7	I feel a strong attachment towards the community, I belong to.					
8	I define myself as a member of my community.					
9	I relate to people from my country as if they were close acquaintances/associates					
10	I feel a strong attachment towards people from my country					



**3. The following questions ask about your social values. Please indicate your answer to each statement:**

N	Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	Being accepted as a member of a group is more important than having autonomy and independence.					
2	Being accepted as a member of a group is more important than being independent.					
3	Group success is more important than individual success.					
4	Being loyal to a group is more important than individual gain.					
5	Individual rewards are not as important as group welfare.					
6	It is more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiative.					
7	Managers should make most decisions without consulting subordinates.					
8	Managers should not ask subordinates for advice, because they might appear less powerful.					
9	Decision making power should stay with top management in the organization and not be delegated to lower level employees.					
10	Employees should not question their manager's decisions.					
11	A manager should perform work which is difficult and important and delegate tasks which are repetitive and mundane to subordinates.					
12	Higher level managers should receive more benefits and privileges than lower level managers and professional staff.					
13	Managers should be careful not to ask the opinions of subordinates too frequently, otherwise the manager might appear to be weak and incompetent.					

**4. Please indicate your answer to each statement:**

	Items	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree
1	I am not sure I fully trust my employer.					
2	My employer is open and upfront with me.					
3	I believe my employer has high integrity.					
4	In general, I believe my employer's motives and intentions are good.					
5	My employer is not always honest and truthful.					
6	I don't think my employer treats me fairly.					
7	I can expect my employer to treat me in a consistent and predictable fashion.					

**5. Please indicate your answer to each statement:**

	Items	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree
1	One should be very cautious when working with people.					
2	Most people tell the truth about the limits of their knowledge.					
3	Most people can be counted on to do what they say they will do.					
4	If possible, it is best to avoid working with people on projects.					
5	Most people are honest in describing their experience and abilities.					
6	Most people answer personal questions honestly.					
7	Most people are very competent.					

**Thank you for participating in the study by answering this questionnaire.**

If you have any comments about this study, please feel free to make them here:

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You can request for your data to be withdrawn at any time after participation in the study. In order to do this, please contact the investigator with your participant ID number.

Please write six characters to be your ID number:

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## **B3: Consent & Debriefing**

### **PARTICIPANT CONSENT FORM**

**Title of Research Project:** Email communication in higher education: an intercultural comparison study.

**Brief Description of Research Project:**

Thank you for your taking part in this study.

If you agree to participate, you will be asked to fill in a short background questionnaire (e.g. age, gender, ethnicity, cultural background, use of social media) and you will also be asked to read an email and complete a questionnaire rating your reactions towards this email and the sender. The overall purpose of the study is to look at the role of email communications in higher education, which is of increasing importance. The whole survey will take approximately 15 minutes.

**Investigator Contact Details:**

Name: Atiah Almaleky  
Department: Psychology  
Roehampton University  
Whitelands College  
Holybourne Avenue  
London SW15 4JD  
Email: [almaleka1@Roehampton.ac.uk](mailto:almaleka1@Roehampton.ac.uk)  
Tel: 0044 20 8392 3587

**Consent Statement:**

I agree to take part in this research, and am aware that I am free to withdraw at any point. I understand that the information I provide will be treated in confidence by the investigator and that my identity will be protected in the publication of any findings.

Name .....

Signature .....

Date .....

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator. However, if you would like to contact an independent party please contact the Head of Department (or if the researcher is a student you can also contact the Director of Studies and Project Supervisor below).

**Project Supervisor Contact Details:**

Dr. Karin Moser  
Department of Psychology  
University of Roehampton  
Whitelands College  
Holybourne Avenue  
London SW15 4JD  
Email: [k.moser@roehampton.ac.uk](mailto:k.moser@roehampton.ac.uk)  
Tel: 0044 20 8392 3719

**Head of Psychology Department:**

Dr. Diane Bray  
Department of Psychology  
University of Roehampton  
Whitelands College  
Holybourne Avenue  
London SW15 4JD  
Email: [d.bray@roehampton.ac.uk](mailto:d.bray@roehampton.ac.uk)  
Tel: 0044 20 8392 3627

**PARTICIPANT DEBRIEF****Title of Research Project: Email communication in higher education: an intercultural comparison study between Saudi Arabia and the United Kingdom.**

Thank you very much for taking part in this study; we greatly appreciate your contribution. This study is investigating the relationship between cultural backgrounds, status and responses to email communication in higher education. The study aims to evaluate the relationship between violation perceptions and behavioural reactions amongst participants from different cultural backgrounds. Moreover, it aims to determine potential differences between Saudis and UK residents related to the sender's status and culture in violation perception and emotional and behavioural reactions to norm violations in email communications. Consequently, the study also hopes to contribute to improving communications via email amongst organisations and develop inter-organisational collaboration between employees and students from different cultural backgrounds.

All data gathered during this study will be held securely and anonymously and only the investigator and his supervisors will have access to it. If you wish to withdraw from the study, please contact the investigator with your unique participant code and your information will be deleted from our files.

Should you have any concerns about any aspect of your participation in this study, please raise it with the investigator in the first instance or with the Project Supervisor or Head of Psychology.

**Investigator**

Atiah Almaleky  
Department of Psychology  
University of Roehampton  
Whitelands College  
Holybourne Avenue  
London SW15 4JD  
Almaleka1@roehampton.ac.uk  
Tel: 0044 20 8392 3587

**Project Supervisor Contact Details:**

Dr. Karin Moser  
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**Head of Psychology Dept.:**

Dr. Diane Bray  
Department of Psychology  
University of Roehampton  
Whitelands College  
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Email: d.bray@roehampton.ac.uk  
Tel: 0044 20 8392 3627

If you are a student or staff at Roehampton University and are troubled or worried about any aspect of the study, or issues it may have raised, you may find it helpful to contact one of the following who will be able to advise you on agencies that can deal with your particular concern:

Departments	Student welfare officers	Tel. numbers
Business, English and creative writing, Humanities, social science	Will Cooper	02083923204
Dance, Drama, Theatre and Performance, Education	Anne-Marie Joyes	02083923304
Life Science, Media, Culture and Language, Psychology	Ejiro Ejoh Jo Eskdale	02083923502 02083923841

**Employee relations and advice on 3125, 3898, 3018**

If you feel your concerns are more serious or complex you may wish to contact the **Student Medical Centre** on Ext 3679. Putneymead Medical Centre Tel: 020 8788 0686 or Queen Mary's Hospital Tel: 020 8789 6611

## **B4: Study 1 Ethical Approval**

From: Jan Harrison

Sent: 06 August 2012 13:19

To: Atiah Almaleky

Subject: Ethics Application Ref: PSYC 12/ 046

Dear Atiah,

### **Ethics Application**

**Applicant:** Atiah Almaleky

**Title:** Emotional and behavioural responses to norm violations in email communications:  
Intercultural comparisons between UK and KSA

**Reference:** PSYC 12/ 046

**Department:** Psychology

### **Conditions**

On behalf of the Ethics Committee I am pleased to confirm that your Department has approved your above application subject to the following conditions:

- i. Application: Please provide a reference list for the sources cited (especially for the measures proposed).
- ii. P4, para 5: follow up studies are mentioned – please note that further ethics approval (or minor amendment form) would be required.
- iii. It is noted that that the approval letter from the Hospital refers to the measures as being “standard” in the field.
- iv. Please clarify and confirm this is the case, especially with respect to measures of “culture” and “cultural identity” which seem to be measured by two items.
- v. Related to 3), please clarify the use of the sports team question as a standard measure. Historically, in Britain, questions like these have been used by some politicians to raise questions about some people’s “Britishness” and “loyalty”. As such, questions like these can be seen as sensitive.
- vi. Please provide more detail of the procedure for implementing the online data collection, especially how consent and debrief are to be handled, confidentiality and anonymity are maintained, and how withdrawal is to be handled.
- vii. Please provide more detail on the paper version collection i.e. who will be collecting the data, how and where. Also on how will data be transported.
- viii. It is stated that support will be arranged for any participant experiencing emotional distress through the support services. Please how this will done.
- ix. Surveys (appx 2, 3,4,5, 9, 10, 18, 20 and translations): Ethics ‘Board’ should be changed to Ethics ‘Committee’.

- x. Debrief Forms (appx 14, 15, 16, 17): the Roehampton logo should be changed to the up to date one, and the words 'Ethics Board' should be changed to Ethics Committee'.
- xi. Debrief for UK University (appx 16): the student welfare officers details have now changed.
- xii. Risk Assessment: the 'e.g' should be deleted from the first item.
- xiii. The second item mentions only using a Roehampton contact details, but the Consent Form and Debriefs give a personal phone number. Please clarify.
- xiv. Item 5 (Overseas Work) – wording should be amended

Please note that you should respond to these conditions within two weeks of the date of this email. When sending revised documentation, please could you include a copy of the conditions listed above and give your response point by point, also indicating where the changes have been made in the documents. Please do not amend anything else unless you have been requested to do so.

Please advise us if there are any changes to the research during the life of the project. Minor changes can be advised using the Minor Amendments Form on the Ethics Website, but substantial changes may require a new application to be submitted.

Many thanks,

Jan

**Jan Harrison**

Ethics Administrator - Research & Business Development Office

University of Roehampton | Froebel College | Roehampton Lane | London | SW15 5PJ

[jan.harrison@roehampton.ac.uk](mailto:jan.harrison@roehampton.ac.uk)<mailto:jan.harrison@roehampton.ac.uk>|

[www.roehampton.ac.uk](http://www.roehampton.ac.uk)<http://www.roehampton.ac.uk>

Tel: +44(0)20 8392 5785

## **B5: Study 2 Ethical Approval**

**From:** Jan Harrison

**Sent:** 27 November 2013 13:57

**To:** Atiah Almaleky (Research Student)

**Subject:** Ethics Application Ref: PSYC 12/ 046: Minor Amendment

Dear Atiah,

### **Ethics Application (Amendment)**

**Applicant:** Atiah Almaleky

**Title:** Emotional and behavioural responses to norm violations in email communications: intercultural comparisons between UK and KSA

**Reference:** PSYC 12/ 046

**Department:** Psychology

**Original Approval Date:** 30.08.12

On behalf of the Ethics Committee I am pleased to confirm that your Department has approved the amendment to your above application dated 22.10.13 with the following minor conditions:

#### **Minor Conditions:**

- i. Roehampton logo required top left (if possible)
- ii. Please change the wording relating to approval at the bottom of page 1 to "This project has been approved under the procedures of the University of Roehampton's Ethics Committee"

As these are only minor conditions it is assumed that you will adhere to these conditions for approval and therefore we do not require a response. We do not require anything further in relation to this application.

Please advise us if there are any further changes to the research during the life of the project. Minor changes can be advised using the Minor Amendments Form on the Ethics Website, but substantial changes may require a new application to be submitted.

Many thanks,

Jan

**Jan Harrison**

Ethics Officer - Research & Business Development Office

University of Roehampton | Froebel College | Roehampton Lane | London | SW15 5PJ

[jan.harrison@roehampton.ac.uk](mailto:jan.harrison@roehampton.ac.uk) | [www.roehampton.ac.uk](http://www.roehampton.ac.uk)

Tel: +44(0)20 8392 5785

## Appendix C: Study 1 Descriptive Analysis

### C1: Descriptive statistics

(mean, standard deviation, minimum and maximum scores, skewness, Z scores, and kurtosis) for the 17 scale measures used in Study 1 (full sample)

	N	Min	Max	Mean	SD
Scale Measures					
Group identity	844	3.00	15.00	12.68	2.31
Social Media	847	5.00	30.00	13.76	5.71
Familiarity	844	1.00	5.00	2.63	1.09
Collectivism	841	6.00	30.00	19.42	4.75
Power Distance	849	7.00	34.00	15.66	5.06
Violation perception	842	8.00	40.00	25.89	6.47
Happiness	840	4.00	20.00	7.93	3.83
Worry	829	4.00	19.00	6.16	2.90
Anger	841	3.00	15.00	5.63	3.08
Guilt	836	4.00	20.00	5.78	2.99
Sadness	843	2.00	10.00	2.89	1.64
Positive Attributs	778	21.00	105.00	53.93	13.36
Liking	841	2.00	10.00	4.77	1.71
Compliance	852	2.00	10.00	5.74	2.05
Move Against	849	3.00	15.00	5.83	2.84
Move Away	843	3.00	15.00	5.56	3.12

### C2: Cross-tabulation of gender by eight study groups

		Eight Study Groups							
Gender		KSA Lecturer	KSA Student	UK Lecturer	UK Student	KSA Doctor	KSA Nurse	UK Doctor	UK Nurse
Female	Count	78	80	60	85	78	74	61	62
	%	70.90%	55.20%	63.20%	89.50%	80.40%	87.10%	41.80%	73.80%
Male	Count	32	65	35	10	19	11	85	22
	%	29.10%	44.80%	36.80%	10.50%	19.60%	12.90%	58.20%	26.20%

Pearson Chi-square X2(7) = 100.006, p = .001.

### C3: Mean age and tenure (yrs) of participants in whole sample and 8 study groups

Variable	Entire Sample	KSA Lecturer	KSA Student	UK Lecturer	UK Student	KSA Doctor	KSA Nurse	UK Doctor	UK Nurse
Age, M (SD)	35.48 (13.12)	43.93 (9.38)	30.66 (6.72)	46.38 (10.21)	20.88 (5.07)	23.87 (4.27)	22.07 (2.35)	48.26 (7.51)	44.10 (11.10)
Tenure, M (SD)	11.32 (11.06)	14.95 (10.91)	3.62 (1.21)	13.66 (9.95)	1.51 (0.644)	6.43 (7.44)	5.76 (6.87)	23.97 (7.75)	17.50 (12.50)



*C4: Differences between 8 UK and KSA study groups for group identity*

		N	Mean	SD	F	Sig.
Group identity Scale	KSA lecturer	109	13.17	1.91	6.72	.001
	KSA student	141	12.79	1.98		
	UK lecturer	95	12.41	2.64		
	UK student	94	11.63	2.42		
	KSA doctor	95	12.07	2.45		
	KSA nurse	80	12.81	2.50		
	UK doctor	146	13.35	2.05		
	UK nurse	84	12.73	2.37		
	Total	844	12.68	2.31		

*C5: Differences between 8 UK and KSA study groups for familiarity with the email style*

		N	Mean	SD	F	Sig.
Familiarity	KSA lecturer	110	2.20	0.87	19.17	.001
	KSA student	144	2.19	0.99		
	UK lecturer	95	2.81	1.01		
	UK student	95	2.57	1.10		
	KSA doctor	92	2.49	1.06		
	KSA nurse	85	2.40	1.06		
	UK doctor	143	3.29	0.99		
	UK nurse	80	3.10	1.07		
	Total	844	2.63	1.09		

*C6: Differences between 8 UK and KSA study groups for use of social media*

		N	Mean	SD	F	Sig.
Social Media Scale	KSA lecturer	107	14.11	4.97	39.31	.001
	KSA student	145	16.03	4.72		
	UK lecturer	95	10.57	4.81		
	UK student	95	16.64	5.32		
	KSA doctor	94	15.72	4.99		
	KSA nurse	81	16.36	5.78		
	UK doctor	146	8.95	3.69		
	UK nurse	84	13.39	6.20		
	Total	847	13.76	5.71		

*C7: Differences between 8 UK and KSA study groups for collectivism*

		N	Mean	SD	F	Sig.
Collectivism Scale	KSA lecturer	109	21.82	4.73	36.45	.001
	KSA student	139	21.37	4.20		
	UK lecturer	95	16.34	3.67		
	UK student	93	15.71	4.01		
	KSA doctor	95	21.08	4.34		
	KSA nurse	80	22.00	4.56		
	UK doctor	146	18.12	3.87		
	UK nurse	84	18.58	3.97		
	Total	841	19.42	4.75		

*C8: Differences between 8 UK and KSA study groups for power distance*

		N	Mean	SD	F	Sig.
Power Distance Scale	KSA lecturer	110	16.07	4.37	26.76	.001
	KSA student	139	17.68	4.82		
	UK lecturer	95	12.79	4.11		
	UK student	95	15.45	4.47		
	KSA doctor	97	19.10	4.61		
	KSA nurse	83	17.37	5.55		
	UK doctor	146	13.06	4.08		
	UK nurse	84	14.07	4.97		
	Total	849	15.66	5.06		

*C9: Differences between 8 UK and KSA study groups for violation perception*

		N	Mean	SD	F	Sig.
Violation perception Scale	KSA lecturer	109	27.25	5.98	7.64	.001
	KSA student	141	26.45	5.12		
	UK lecturer	95	27.51	6.30		
	UK student	92	25.61	7.00		
	KSA doctor	95	24.18	6.28		
	KSA nurse	80	23.16	5.66		
	UK doctor	146	24.63	6.98		
	UK nurse	84	28.37	7.00		
	Total	842	25.89	6.47		

*C10: Differences between 8 UK and KSA study groups for happiness*

		N	Mean	SD	F	Sig.
Happiness Scale	KSA lecturer	108	8.42	4.38	23.84	.001
	KSA student	144	9.44	4.18		
	UK lecturer	95	5.83	2.60		
	UK student	95	8.47	3.35		
	KSA doctor	93	9.84	3.98		
	KSA nurse	75	9.41	3.72		
	UK doctor	146	6.19	2.54		
	UK nurse	84	6.01	2.65		
	Total	840	7.93	3.83		

*C11: Differences between 8 UK and KSA study groups for worry*

		N	Mean	SD	F	Sig.
Worry Scale	KSA lecturer	107	7.12	3.63	5.56	.001
	KSA student	141	6.81	3.17		
	UK lecturer	95	5.66	2.00		
	UK student	93	5.52	2.28		
	KSA doctor	92	6.46	3.35		
	KSA nurse	71	6.28	2.88		
	UK doctor	146	5.40	2.19		
	UK nurse	84	6.01	2.91		
	Total	829	6.16	2.90		

*C12: Differences between 8 UK and KSA study groups for anger*

		N	Mean	SD	F	Sig.
Anger Scale	KSA lecturer	107	6.99	3.59	6.60	.001
	KSA student	145	6.14	3.18		
	UK lecturer	95	5.71	3.00		
	UK student	93	4.51	2.47		
	KSA doctor	95	5.72	3.27		
	KSA nurse	76	5.49	2.98		
	UK doctor	146	5.23	2.72		
	UK nurse	84	4.94	2.69		
	Total	841	5.63	3.08		

*C13: Differences between 8 UK and KSA study groups for guilt*

		N	Mean	SD	F	Sig.
Guilt Scale	KSA lecturer	107	7.46	3.85	18.21	.001
	KSA student	145	6.75	3.34		
	UK lecturer	95	4.51	1.09		
	UK student	93	5.12	2.39		
	KSA doctor	95	6.78	3.79		
	KSA nurse	76	5.85	2.81		
	UK doctor	146	4.50	1.46		
	UK nurse	84	5.24	2.34		
	Total	841	5.78	2.99		

*C14: Differences between 8 UK and KSA study groups for sadness*

		N	Mean	SD	F	Sig.
Sadness Scale	KSA lecturer	107	3.41	2.00	3.84	.001
	KSA student	145	2.97	1.76		
	UK lecturer	95	2.94	1.54		
	UK student	93	2.35	1.09		
	KSA doctor	95	3.09	1.83		
	KSA nurse	76	2.91	1.67		
	UK doctor	146	2.65	1.37		
	UK nurse	84	2.83	1.52		
	Total	841	2.89	1.64		

*C15: Differences between 8 UK and KSA study groups for positive attributions*

		N	Mean	SD	F	Sig.
Positive Attributions Scale	KSA lecturer	99	48.38	13.50	7.67	.001
	KSA student	125	50.80	12.00		
	UK lecturer	95	54.32	12.74		
	UK student	91	59.53	13.16		
	KSA doctor	79	55.51	12.47		
	KSA nurse	68	55.53	12.83		
	UK doctor	142	56.53	12.06		
	UK nurse	79	51.25	15.75		
	Total	778	53.93	13.36		

*C16: Differences between 8 UK and KSA study groups for liking*

		N	Mean	SD	F	Sig.
Liking Scale	KSA lecturer	110	4.09	1.69	11.54	.001
	KSA student	143	4.22	1.69		
	UK lecturer	95	4.79	1.25		
	UK student	95	5.52	1.68		
	KSA doctor	90	4.62	1.96		
	KSA nurse	85	4.56	1.69		
	UK doctor	143	5.10	1.44		
	UK nurse	80	5.56	1.73		
	Total	841	4.77	1.71		

*C17: Differences between 8 UK and KSA study groups for compliance*

		N	Mean	SD	F	Sig.
Compliance Scale	KSA lecturer	110	5.95	2.05	2.74	0.008
	KSA student	143	5.63	1.75		
	UK lecturer	95	5.13	2.05		
	UK student	93	6.00	2.27		
	KSA doctor	96	6.05	1.99		
	KSA nurse	85	5.98	1.91		
	UK doctor	146	5.81	2.08		
	UK nurse	84	5.31	2.21		
	Total	852	5.74	2.05		

*C18: Differences between 8 UK and KSA study groups for move against tendency*

		N	Mean	SD	F	Sig.
Move Against Scale	KSA lecturer	110	7.83	3.44	31.78	.001
	KSA student	143	6.67	2.62		
	UK lecturer	95	4.77	2.22		
	UK student	93	4.59	1.91		
	KSA doctor	96	6.85	2.78		
	KSA nurse	85	7.00	2.76		
	UK doctor	146	4.34	2.04		
	UK nurse	84	4.70	2.24		
	Total	852	5.83	2.84		

*C19: Differences between 8 UK and KSA study groups for move away tendency*

		N	Mean	SD	F	Sig.
Move Away Scale	KSA lecturer	110	5.93	3.02	5.08	.001
	KSA student	143	6.50	3.08		
	UK lecturer	95	5.81	3.88		
	UK student	93	5.24	3.49		
	KSA doctor	96	5.79	2.81		
	KSA nurse	85	5.69	2.44		
	UK doctor	146	4.63	2.80		
	UK nurse	84	4.80	2.84		
	Total	852	5.56	3.12		

## Appendix D: Data Analysis

### D1: Study 1 Data Analysis

The KSA participant data was manually entered into SPSS version 19.0 for coding and data screening. Subsequently, the online data for the UK sample was downloaded automatically to SPSS automatically, and was then checked for completeness, and merged with the KSA data, with each participant from each country assigned a unique identifying number. The full dataset was then screened for data entry errors, missing values, outliers, and test assumptions including normality and homogeneity of variance. Incomplete questionnaires were deleted from the dataset if they were less than 70% completed. Missing values in the remaining dataset were recoded as '999' to code them as missing values, which would exclude them from analysis.

Next, continuous variables were assessed for normality, as normality is an assumption for parametric tests, using a number of statistics including skewness, kurtosis, a Kolmogorov-Smirnov test of normality, and a visual examination of all histograms and boxplots. Boxplots were checked to identify univariate outliers, and Mahalanobis distance was used to check for multivariate outliers using multiple regression, as multivariate outliers can distort the results.

The reliability of all measures was performed to assess the internal consistency of each scale using Cronbach's alpha. Next, the composite scales and subscales for each measure were computed by summing or averaging the respective items for each scale, based on the scale scoring instructions. Descriptive statistics for each continuous variable were then generated, including means, standard deviations, median and range, and frequency counts and percentages for the categorical variables, to show the variability in the data. The formal analysis commenced with correlations to examine relationships between the study variables. As the assumption of normality was violated, non-parametric Spearman rank-order correlations were appropriate. Independent samples t-tests were conducted to compare the mean scores for all study variables between UK and KSA participant groups overall.

Mediation tests were performed using path analysis procedures outlined by Baron & Kenny (1986), using linear and multiple regression. Four conditions must be satisfied for mediation to exist. (1) IV predicts the DV. (2) Mediator predicts the DV. (3). Mediator predicts the DV, when IV is controlled for. (4). When mediator is controlled for, IV is less significant or non-significant. Any significant mediation effects were followed up by calculating the Sobel test, which was also calculated using MedGraph at the Moderation Mediation Help Centre (School of Psychology, University of Wellington, New Zealand. URL: [http://pavlov.psyc.vuw.ac.nz/paul-jose/helpcentre/help1\\_intro.php](http://pavlov.psyc.vuw.ac.nz/paul-jose/helpcentre/help1_intro.php)).

Moderation testing was performed using hierarchical regression testing procedures outlined by Baron & Kenny (1986). First, categorical predictor variables were dummy coded (0, 1). All continuous predictor variables were mean-centred to reduce the risk of multicollinearity, and then interaction (product) terms were created by multiplying each predictor variable by the moderator variable. In step 1, the predictor and moderator variable were entered into the regression model, in step 2, the interaction term was entered, and separate regressions were run for each dependent variable. Moderation is considered to exist when the interaction term (IV\*Moderator) in the regression model is significant.

A series of hierarchical regression analyses were carried out to examine the moderator effects (sender's status and sender's culture) on the relationship between: (1) violation perception and affective responses (happiness, worry, anger, guilt and sadness), (2) violation perception and external attributions, positive attributions and liking, (3) violation perception and behavioural reactions (compliance, moving against and moving away). The application of hierarchical regression to test the moderator effects was preceded by dummy-coding the sender's culture (1 = same culture, 0 =

different culture). The sender's status was dummy-coded by giving the same-status code = 0. Two status variables were created. In the first variable (lower status vs. same status), lower status = 1 and higher status = 0. In the second variable (higher status vs. same status), lower status = 0 and higher status = 1. Violation perception was centred by subtracting the mean score from each data point.

The first step was to enter the centred violation perception variable along with the moderator (sender's status). The second step was to enter the interaction variable, which was derived by multiplying the sender's status (dummy-coded) with centred violation (sender's status\*violation). In this step, 'moderation is shown up by a significant interaction effect' (Field, 2013, p. 403). Affective responses (e.g. happiness) were entered as dependent variables. The regressions were carried out with all affective response variables, behavioural response variables, and attributions and liking variables. The steps above were then repeated with the second moderator (sender's culture).

The second series of hierarchical regressions was conducted to examine the moderator effects (sender's status and sender's culture) on the relationship between: (1) Affective responses and behavioural reactions, (2) Attributions and behavioural reactions, (3) Liking and behavioural reactions. The application of hierarchical regression to test the moderator effects was preceded by dummy-coding the sender's culture (1 = same culture, 0 = different culture). The sender's status was dummy-coded by giving the same status code = 0. Two variables were created: in the first variable (lower status vs. same status), lower status = 1 and higher status = 0. In the second variable (higher status vs. same status), lower status = 0 and higher status = 1. Violation perception was centred by subtracting the mean score from each data point.

The first step was to enter violation perception as the control variable. The second step was to enter the centred independent variable (e.g. happiness) along with the moderator (sender's status). The third step was to enter the interaction variable, which was derived by multiplying the sender's status (dummy-coded) with the centred independent variable, such as happiness (sender's status\*happiness). Behavioural response variables (e.g. compliance) were entered as dependent variables. The regressions were carried out with all affective response variables, attributions and the 'liking' variable as independent variables. Behavioural responses were dependent variables. The steps above were repeated with the second moderator (sender's culture).



## D2: Study 2 Data Analysis

As per Study 1, most data analysis procedures in Study 2 are similar to Study 1. The only difference being the additional moderation tests performed in Study 2 to examine the additional moderating effects of global identity, local identity, two personality traits of extraversion and emotional stability, and two trust variables including dispositional and organisational trust.

After the online survey data were downloaded from Lime Survey to SPSS, the data were checked for completeness using visual examination of the data, and by performing the SPSS Missing Values Analysis procedure, which found no problem with missing data, only missing at random.

The next stage involved conducting reliability analysis on each of the measurement scales using Cronbach's alpha, to assess their internal consistency. Once reliability was deemed satisfactory (i.e. alphas above .7, but ideally above .8), composite variables were computed by summing the participant's scores to each item within each scale.

Next, descriptive statistics were generated for all continuous and categorical variables to assess the variability in the data, and screen for the main parametric test assumptions of normality, univariate and multivariate outliers, linearity, homogeneity, singularity, and multicollinearity. Any minimal missing values in the dataset were recoded as '999', so that SPSS would exclude them from the analysis. Frequency analysis was also performed to profile the participants by their gender, age group, position, country, region, nationality, ethnicity, department, etc.

Moderation testing was performed to examine whether several moderators have a significant influence on the relationship between violation perception and the study outcomes. The moderation tests were performed on the full sample, regardless of the status or culture of the email sender or receiver. Any significant moderation effects were followed-up by creating simple slopes using the online Modgraph software (School of Psychology, University of Wellington, New Zealand. URL: [http://pavlov.psyc.vuw.ac.nz/paul-jose/helpcentre/help1\\_intro.php](http://pavlov.psyc.vuw.ac.nz/paul-jose/helpcentre/help1_intro.php)), which produces of the figure of the moderation effect at each level (low, medium, high) on the IV (low, medium, high), which helps to interaction where the moderation effect occurred.

A moderator is a variable that changes the relationship between an independent variable and a dependent variable. A significant moderation effect means that the effect of the independent variable on the dependent variable changes depending on the level of the moderator. When using continuous moderator variables, we usually compare "high" levels of the moderator (at +1 sample standard deviation above the mean) with "low" levels (at -1 sample standard deviation below the mean). Simple slope graphs can be computed to evaluate the moderator effects in multiple linear regression models, which indicate the moderation effect at the three levels: one sample standard deviation above the mean (high level), at the mean (medium level), and one sample standard deviation below the mean (low level). To test moderation effects in Study 2, hierarchical multiple regression was performed to examine the effects of six potential moderators, including: global identity, local identity, organizational trust, dispositional trust, extraversion and emotional stability personality traits, on the relationships between violation perception and affective responses; and on the relationships between affective responses and behavioural reactions. Independent variables and moderator variables were mean-centered. Interaction terms were computed by multiplying each mean centred independent variable by the relevant mean centred moderator. Independent variable and moderator were entered in the first step of each regression analysis. In the second step of the regression analysis, the interaction term between Independent variable and moderator was entered. If the interaction term had a significant p-value and its inclusion in the model reduced the Beta value of the independent

variable, this was considered to indicate a significant moderation effect. Due to the large number of moderation tests performed, only significant moderation effects were reported.

After the hypothesis testing, follow-up mediation tests were performed using path analysis procedures as outlined by Baron & Kenny (1986), using hierarchical linear regression. Any significant mediation effects were followed up by calculating the Sobel test, using the online MedGraph software at the Moderation Mediation Help Centre (School of Psychology, University of Wellington, New Zealand. URL: [http://pavlov.psyc.vuw.ac.nz/paul-jose/helpcentre/help1\\_intro.php](http://pavlov.psyc.vuw.ac.nz/paul-jose/helpcentre/help1_intro.php))

# Appendix E: Study 1 Correlations

E1: Spearman's rank correlation coefficient for Entire Sample (N=857)

ALL (N=857)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	.170"																	
3- Years of work	.164"	.685"																
4- Social Media	-.142"	-.453"	-.475"															
5- No. emails	.199"	.552"	.502"	-.292"														
6- Group ID	.040	.162"	.210"	-.119"	.157"													
7- Collectivism	-.087"	-.091"	-.014	.160"	-.204"	.124"												
8- Power distance	-.107"	-.277"	-.250"	.232"	-.339"	-.122"	.214"											
9- Violation percep	-.308"	.087"	.028	-.019	.066	-.024	-.017	-.028										
10- Happiness	.139"	-.279"	-.248"	.208"	-.319"	-.032	.217"	.217"	-.477"									
11- Worry	-.208"	.003	-.030	.078"	-.073"	.073"	.116"	.103"	.287"	.005								
12- Anger	-.260"	.095"	.052	-.018	.008	.063	.076"	.062	.464"	-.241"	.659"							
13- Guilt	-.257"	-.084"	-.083"	.137"	-.187"	-.015	.178"	.190"	.257"	.019	.614"	.590"						
14- Sadness	-.158"	.073"	.051	.005	.002	.039	.051	.034	.266"	-.079	.655"	.593"	.562"					
15- Compliance	.294"	-.067	-.013	.046	-.062	.057	.075"	.030	-.564"	.420"	-.300"	-.429"	-.220"	-.306"				
16- Move against	-.169"	-.098"	-.120"	.201"	-.201"	.058	.203"	.192"	.166"	.119"	.386"	.383"	.410"	.351"	-.114"			
17- Move away	-.259"	-.093"	-.098"	.049	-.118"	-.031	.056	.139"	.242"	-.032	.366"	.440"	.342"	.304"	-.370"	.248"		
18- Liking	.422"	-.064	-.008	-.029	.004	.050	-.031	-.013	-.429"	.356"	-.126"	-.266"	-.183"	-.192"	.392"	-.070	-.168"	
19- Positive Attribs	.610"	-.014	-.002	-.014	.109"	.018	-.024	-.031	-.400"	.311"	-.219"	-.390"	-.246"	-.214"	.427"	-.186"	-.312"	.592"

\*\* . Correlation is significant at the 0.01 level (2-tailed). \* . Correlation is significant at the 0.05 level (2-tailed).

E2: Spearman's rank correlation coefficient for UK Sample (N=420)

UK ALL (N=420)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	0.126																	
3- Years of work	.136"	.831"																
4- Social Media	-.077	-.522"	-.503"															
5- No. emails	.046	.514"	.498"	-.306"														
6- Group ID	.085	.223"	.295"	.188"	.286"													
7- Collectivism	.147"	.078	.149"	.058	.087	0.098												
8- Power distance	.007	-.245"	-.227"	.210"	-.229"	-.157"	.031											
9- Violation percep	-.314"	-.025	-.062	.051	-.003	-.027	.035	.055										
10- Happiness	.145"	-.238"	-.212"	.173"	-.213"	-.080	.081	.170"	-.444"									
11- Worry	-.194"	.055	.001	.024	.017	.062	.040	.010	.360"	-.087								
12- Anger	-.177"	.166"	.0121	-.140"	.130"	.064	.047	-.022	.463"	-.255"	.618"							
13- Guilt	-.0123	-.071	-.075	.0107	-.084	-.060	.073	.031	.254"	.028	.475"	.401"						
14- Sadness	-.0101	.0118	.093	-.056	.085	.048	.054	-.0099	.329"	-.136"	.616"	.575"	.482"					
15- Compliance	.285"	-.067	-.018	.071	-.081	.041	.025	.042	-.686"	.425"	-.370"	-.493"	-.209"	-.324"				
16- Move against	-.052	-.022	-.013	.004	.043	.037	-.020	-.003	.276"	-.014	.426"	.466"	.364"	.407"	-.277"			
17- Move away	-.222"	-.066	-.059	-.037	.013	-.040	.015	.008	.415"	-.195"	.343"	.521"	.243"	.288"	-.510"	.278"		
18- Liking	.433"	-.139"	-.137"	.195"	-.134"	.002	.153"	.086	-.423"	.387"	-.272"	-.467"	-.127"	-.216"	.541"	-.166"	-.407"	
19- Positive Attribs	.329"	-.0104	-.063	.077	-.129"	.024	.069	-.018	-.469"	.383"	-.140"	-.265"	-.159"	-.199"	.481"	-.077	-.251"	.514"

\*\* . Correlation is significant at the 0.01 level (2-tailed).

KSA ALL (N=437)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	-.052																	
3- Years of work	.026	.300**																
4- Social Media	-.031	-.135**	-.239**															
5- No. emails	-.032	.301**	.225**	.105*														
6- Group ID	-.008	.088	.081	-.045	.065													
7- Collectivism	-.016	-.007	.117*	-.056	.080	.167**												
8- Power distance	.020	-.131**	-.072	.008	-.087	-.098*	.068											
9- Violation percep	-.366**	.223**	.071	-.067	.094	-.019	.021	-.073										
10- Happiness	.380**	-.114*	-.090	.044	-.133**	.040	.038	.028	.502**									
11- Worry	-.124*	.065	-.004	.003	.069	.089	.061	.062	.232**	-.004								
12- Anger	-.258**	.117*	.035	.002	.130**	.070	.016	.027	.496**	-.330**	.680**							
13- Guilt	-.174**	.100*	.061	-.051	.105*	.015	-.011	.106*	.333**	-.163**	.705**	.717**						
14- Sadness	-.150**	.056	.026	-.003	.063	.036	-.014	.072	.220**	-.090	.690**	.598**	.651**					
15- Compliance	.359**	-.040	.076	-.020	.013	.075	.061	-.030	-.402**	.425**	-.265**	-.394**	-.309**	-.305**				
16- Move against	.011	.086	.027	.091	.134**	.090	.010	.023	.183**	-.076	.275**	.267**	.274**	.295**	-.036			
17- Move away	-.133**	.032	-.031	-.015	.050	-.041	-.109*	.101*	.106*	-.052	.348**	.333**	.339**	.295**	-.282**	.047		
18- Liking	.683**	-.085	-.006	-.031	-.007	.032	.086	.072	-.450**	.487**	-.105*	-.283**	-.179**	-.173**	.388**	-.009	-.130**	
19- Positive Attribs	.465**	-.193**	-.038	-.016	-.055	.062	.007	.136**	-.412**	.478**	-.059	-.239**	-.108*	-.156**	.313**	.051	-.030	.644**

\*\* Correlation is significant at the 0.01 level (2-tailed)

E4: Spearman's rank correlation coefficient for Higher Education Sample (N=445)

HE ALL (N=445)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	.056																	
3- Years of work	.005	.666**																
4- Social Media	-.063	-.328**	-.334**															
5- No. emails	.068	.426**	.356**	-.195**														
6- Group ID	-.025	.155**	.213**	-.090	.085													
7- Collectivism	-.057	0.123	.166**	.089	-.162**	.165**												
8- Power distance	-.064	-0.121	-0.107	.081	-.302**	-.079	.231**											
9- Violation percep	-.326**	0.099	.082	-0.1	.081	-.007	-.049	-.025										
10- Happiness	.201**	-.186**	-.155**	.170**	-.265**	.017	.236**	.181**	-.480**									
11- Worry	-.213**	.073	.144**	-.053	-.043	0.108	.160**	0.118	.270**	.001								
12- Anger	-.278**	.156**	.249**	-.064	.045	.076	0.121	.066	.453**	-.287**	.639**							
13- Guilt	-.242**	.031	.147**	-.012	-.153**	.038	.237**	.167**	.281**	-.023	.576**	.601**						
14- Sadness	-.206**	.152**	.213**	-.125**	.013	.089	.091	.023	.280**	-.086	.629**	.604**	.547**					
15- Compliance	.335**	-0.096	-.043	.083	-.074	.063	.092	.051	-.556**	.426**	-.224**	-.375**	-.178**	-.285**				
16- Move against	-.091	.141**	.149**	0.095	-0.107	.129**	.277**	.136**	.142**	.067	.331**	.308**	.336**	.319**	-.027			
17- Move away	-.278**	-.005	.082	-.047	-.029	-.022	.059	0.121	.263**	-.072	.364**	.461**	.323**	.309**	-.370**	.132**		
18- Liking	.606**	-.131**	-.178**	.014	.018	-.051	-.025	.019	-.436**	.341**	-.266**	-.428**	-.277**	-.290**	.418**	-.161**	-.357**	
19- Positive Attribs	.435**	-.161**	-0.127	.051	-.052	-0.10	-.067	.038	-.380**	.340**	-.129**	-.311**	-.219**	-.250**	.342**	-0.1	-.199**	.633**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

E5: Spearman's rank correlation coefficient for Healthcare Sample (N=412)

HC ALL (N=412)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	.266**																	
3- Years of work	.205**	.763**																
4- Social Media	-.169**	-.561**	-.560**															
5- No. emails	.256**	.666**	.583**	-.338**														
6- Group ID	.076	.185**	.180**	-.0127	.221**													
7- Collectivism	-.145**	-.375**	-.250**	.256**	-.254**	.073												
8- Power distance	-.143**	-.452**	-.380**	.345**	-.363**	-.164**	.204**											
9- Violation percep	-.255**	.081	.045	.008	.079	-.031	.025	-.042										
10- Happiness	0.101	-.402**	-.332**	.247**	-.356**	-.083	.204**	.247**	-.500**									
11- Worry	-.165**	-.073	-.0105	.174**	-.073	.052	.072	.078	.285**	-.006								
12- Anger	-.193**	.029	-.028	-.004	.008	.066	.024	.046	.463**	-.210**	.669**							
13- Guilt	-.216**	-.221**	-.212**	.256**	-.179**	-.056	0.115	.196**	.207**	.048	.648**	.560**						
14- Sadness	-.097	-.030	-.050	0.123	-.023	-.011	.003	.042	.249**	-.071	.683**	.583**	.588**					
15- Compliance	.254**	-.065	-.015	.026	-.047	.046	.054	.012	-.577**	.416**	-.385**	-.488**	-.276**	-.327**				
16- Move against	-.201**	-.384**	-.310**	.276**	-.254**	.002	.127	.238**	.171**	.161**	.432**	.455**	.485**	.386**	-.205**			
17- Move away	-.201**	-.201**	-.214**	0.112	-.182**	-.030	.057	.140**	.207**	-.004	.351**	.397**	.335**	.297**	-.376**	.361**		
18- Liking	.598**	0.116	.095	-.004	.162**	.073	-.027	-.071	-.344**	.289**	-.155**	-.332**	-.185**	-.0121	.438**	-.198**	-.242**	
19- Positive Attribs	.397**	.003	.055	-.079	.033	.099	.010	-.042	-.470**	.399**	-.0115	-.204**	-.121**	-.0113	.445**	-.026	-.0114	.535**

\*\* . Correlation is significant at the 0.01 level (2-tailed).



E6: Spearman's rank correlation coefficient for KSA Higher Education Sample (N=225)

KSA HE (N=225)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	.098																	
3- Years of work	.052	.337**																
4- Social Media	-.031	-.121	-.208**															
5- No. emails	-.028	.402**	.324**	.022														
6- Group ID	.036	.050	.067	-.070	.083													
7- Collectivism	.028	.007	.055	-.063	.087	.172**												
8- Power distance	-.002	-.085	-.059	-.110	-.197**	-.106	.064											
9- Violation percep	-.356**	.066	.035	-.052	.091	-.083	-.061	-.055										
10- Happiness	.356**	-.076	-.064	.090	-.184**	.083	.095	.029	-.554**									
11- Worry	-.172**	.043	.118	-.078	.023	.084	.031	.022	.273**	-.021								
12- Anger	-.271**	.051	.207**	-.049	.100	.046	-.045	-.012	.507**	-.402**	.620**							
13- Guilt	-.209**	.038	.191**	-.119	.039	-.038	-.044	.055	.356**	-.205**	.665**	.699**						
14- Sadness	-.221**	.095	.171**	-.129	-.005	.031	-.021	.016	.287**	-.115	.651**	.572**	.630**					
15- Compliance	.362**	.044	.100	-.001	.054	.097	.111	-.038	-.443**	.433**	-.201**	-.363**	-.295**	-.298**				
16- Move against	.037	.213**	.0148	.033	.069	.101	.037	-.025	.181**	-.124	.215**	.208**	.204**	.259**	.001			
17- Move away	-.192**	-.048	.044	-.096	-.019	-.014	-.049	.109	0.165	-.062	.322**	.326**	.285**	.280**	-.311**	-.087		
18- Liking	.639**	.040	-.036	-.017	-.018	.029	0.161	.078	-.430**	.447**	-.0163	-.319**	-.218**	-.255**	.359**	.001	-.206**	
19- Positive Attribs	.453**	.010	-.023	-.019	-.104	.085	.043	.122	-.388**	.498**	-.082	-.273**	-.0136	-.242**	.320**	.032	-.111	.635**

\*\* . Correlation is significant at the 0.01 level (2-tailed).



E7: Spearman's rank correlation coefficient for UK Higher Education Sample (N=190)

UK HE (N=190)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	.049																	
3- Years of work	.023	.840**																
4- Social Media	-.045	-.541**	-.499**															
5- No. emails	.007	.630**	.632**	-.345**														
6- Group ID	-.020	.142	.256**	-.0176	.242**													
7- Collectivism	0.166	.057	.079	.014	.029	-.046												
8- Power distance	-.003	-.253**	-.281**	.209**	-.275**	-.0143	0.148											
9- Violation percep	-.293**	.140	.128	-.134	.103	.069	.016	.009										
10- Happiness	.116	-.377**	-.403**	.221**	-.290**	-.130	0.146	.277**	-.400**									
11- Worry	-.0175	.042	.079	-.097	.075	.074	.121	.102	.270**	-.051								
12- Anger	-.0186	.226**	.215**	-.0155	.222**	.035	.137	.011	.402**	-.239**	.628**							
13- Guilt	-.088	-.102	-.036	-.007	-.071	-.026	.200**	.084	.228**	.092	.353**	.363**						
14- Sadness	-.114	0.159	.200**	-.0166	.198**	.121	.128	-.078	.275**	-.106	.591**	.634**	.400**					
15- Compliance	.323**	-.232**	-.195**	.0149	-.214**	.008	.011	.130	-.670**	.430**	-.292**	-.447**	-.101	-.295**				
16- Move against	-.030	-.077	-.017	-.016	.055	.007	.084	.064	0.153	.101	.389**	.340**	.225**	.356**	-.118			
17- Move away	-.266**	-.041	.044	-.050	.121	.005	.001	.025	.372**	-.199**	.346**	.564**	.276**	.304**	-.459**	.245**		
18- Liking	.489**	-.268**	-.307**	.0172	-.241**	-.049	0.179	0.163	-.488**	.396**	-.305**	-.468**	-.102	-.263**	.578**	-.100	-.458**	
19- Positive Attribs	.303**	-.253**	-.0165	.227**	-.240**	-.027	0.169	.114	-.415**	.303**	-.060	-.266**	-.123	-.191**	.433**	-.048	-.201**	.528**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

E8: Spearman's rank correlation coefficient for KSA Healthcare Sample (N=182)

KSA HC (N=182)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	-.035																	
3- Years of work	.066	.120																
4- Social Media	-.057	-.070	-.230**															
5- No. emails	.019	.038	.059	.273**														
6- Group ID	-.032	.014	-.003	-.002	-.009													
7- Collectivism	-.067	-.055	0.164	-.041	.035	.149												
8- Power distance	.015	.055	-.004	.133	.126	-.076	.083											
9- Violation percep	-.344**	-.035	.024	-.028	.001	-.008	.118	.002										
10- Happiness	.404**	-.075	-.100	-.070	.004	.010	-.048	-.017	-.403**									
11- Worry	-.024	-.142	-.210**	.149	.079	.076	.100	0.17	.126	.061								
12- Anger	-.0194	-.066	-.229**	.108	.114	.075	.091	0.152	.418**	-.0188	.745**							
13- Guilt	-.085	-.079	-.133	.095	.147	.074	.035	.242**	.241**	-.066	.748**	.724**						
14- Sadness	-.029	-.098	-.0174	0.199	.147	.030	-.007	0.185	.116	-.027	.742**	.643**	.678**					
15- Compliance	.343**	-.064	.066	-.049	-.008	.056	-.005	-.035	-.336**	.422**	-.353**	-.428**	-.323**	-.318**				
16- Move against	-.008	-.136	-.134	0.195	.228**	.072	-.036	.115	0.17	.029	.378**	.362**	.375**	.352**	-.073			
17- Move away	-.024	.001	-.143	.129	.135	.086	-.209**	.117	-.010	-.031	.354**	.320**	.396**	.315**	-.233**	.256**		
18- Liking	.738**	-.059	.079	-.070	.078	.058	-.009	.039	-.425**	.542**	.002	-.019	-.094	-.032	.413**	-.012	.012	
19- Positive Attribs	.447**	-.148	.057	-.065	.151	.093	-.017	.085	-.383**	.437**	.033	-.123	-.007	.026	.299**	.076	.150	.620**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

E9: Spearman's rank correlation coefficient for UK Healthcare Sample (N=230)

UK HC (N=230)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1- Familiarity																		
2- Age	-.052																	
3- Years of work	-.095	.853**																
4- Social Media	.018	-.402**	-.389**															
5- No. emails	-.055	.197**	.272**	-.121														
6- Group ID	.053	.122	.122	-.075	.230**													
7- Collectivism	.012	-.172**	-.0147	.233**	-.017	.108												
8- Power distance	.051	-.187**	-.188**	0.152	-.0137	-.124	-.002											
9- Violation percep	-.336**	-.014	-.0137	0.135	-.102	-.089	.078	.070										
10- Happiness	.250**	.006	.009	.082	-.019	.034	.112	.045	-.496**									
11- Worry	-.190**	0.133	.068	.083	-.036	.076	-.008	-.063	.422**	-.125								
12- Anger	-.017	.174**	.128	-.0139	.024	.081	-.032	-.045	.508**	-.263**	.610**							
13- Guilt	-.014	.017	-.016	0.165	-.095	-.086	-.011	-.030	.270**	-.034	.572**	.429**						
14- Sadness	-.107	.107	.104	.028	-.070	-.027	-.021	-.119	.365**	-.015	.638**	.526**	.556**					
15- Compliance	.264**	.057	.057	.050	.051	.064	.028	-.023	-.691**	.428**	-.437**	-.541**	-.305**	-.353**				
16- Move against	-.019	.065	.083	-.019	.078	.101	-.077	-.078	.362**	-.013	.449**	.573**	.489**	.455**	-.408**			
17- Move away	-.015	.019	-.023	-.089	-.060	-.044	.082	-.035	.453**	-.215**	.351**	.495**	.210**	.291**	-.562**	.304**		
18- Liking	.396**	-.111	-.130	.261**	-.059	.022	.130	.020	-.368**	.397**	-.245**	-.470**	-.014	-.182**	.505**	-.219**	-.359**	
19- Positive Attribs	.410**	.098	.082	-.040	.018	.116	.023	-.127	-.523**	.450**	-.209**	-.263**	-.194**	-.203**	.518**	-.102	-.314**	.500**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## Appendix F: Study 2 Descriptive analysis

F1: Sample characteristics for Study 2 (International business sample) (N=744)

Variable	Category	Frequency	Percent
Gender	Female	189	25.4
	Male	<b>555</b>	<b>74.6</b>
Education	Less than high school	60	8.1
	High school graduate (equivalent)	194	26.1
	Some college, no degree	96	12.9
	Diploma	131	17.6
	Bachelor's degree	<b>224</b>	<b>30.1</b>
	Master's degree	31	4.2
	Ph.D.	8	1.1
Ethnicity	White	119	16.0
	Black	14	1.9
	Indian	58	7.8
	Chinese	31	4.2
	Asian (non-Chinese)	95	12.8
	Arab	<b>414</b>	<b>55.6</b>
	Mixed	7	.9
	Other	6	.8
Your country of work?	Yes	<b>552</b>	<b>74.2</b>
	No	192	25.8
Which region are you working in?	Africa	55	7.4
	Asia	<b>537</b>	<b>72.2</b>
	Central America and Caribbean	90	12.1
	Europe	47	6.3
	Oceania	15	2.0
Cultural identity	British	56	7.5
	American	63	8.5
	Indian	58	7.8
	Chinese	31	4.2
	Asian (non-Chinese)	95	12.8
	Arab	<b>414</b>	<b>55.6</b>
	Irish	5	.7
	German	16	2.2
	Russian	4	.5
	Turkish	2	.3

Continued, Sample characteristics for Study 2 (International business sample) (N=744)

Variable	Category	Frequency	Percent
Email sender's culture	Same Culture	380	51.1
	Different Culture	364	48.9
Email sender's status	Same Status	214	28.8
	Higher Status	278	37.4
	Lower Status	252	33.9
Are you a native English speaker?	Yes	115	15.5
	No	629	84.5
Are you working fulltime?	Yes	641	86.6
	No	99	13.4
Which area(s) are you mainly working in?	Administration	147	19.8
	Customer Service	121	16.3
	Engineering	24	3.2
	Finance	69	9.3
	Human Resources (HR)	70	9.4
	Information Technology (IT)	53	7.1
	Insurance	48	6.5
	Inventory	26	3.5
	Licenses	46	6.2
	Maintenance	46	6.2
	Marketing	46	6.2
	Operations	46	6.2
	Upper Management	54	7.3
	Middle Management	107	14.4
Occupational position	Junior Management	212	28.5
	Supervisor	212	28.5
	Administrative Staff	159	21.4
	Yes	367	49.3
	No	377	50.7
Are you supervising other people?	Yes	367	49.3
	No	377	50.7
Which of the following categories best describes the primary area of your current employment?	Hotel Services	250	33.6
	Oil, Chemical& Gas Industry	236	31.7
	Water & Power	258	34.7

*F2: Mean, standard deviation and range for psychometric scales in full sample, Study 2*

<b>Psychometric Scales</b>	<b>Mean</b>	<b>SD</b>	<b>Minimum Score</b>	<b>Maximum Score</b>
Familiarity	2.73	1.16	1.00	5.00
Social media use	25.20	7.22	7.00	42.00
Group identity	11.48	2.86	3.00	20.00
Power distance	18.13	5.08	7.00	32.00
Collectivism	17.21	4.72	6.00	30.00
Global identity	16.93	4.52	5.00	25.00
Local identity	11.46	4.43	5.00	25.00
<i>Trust</i>				
Organisational trust	21.58	4.70	7.00	35.00
Dispositional trust	21.63	4.84	7.00	35.00
Violation perception	24.14	7.10	8.00	40.00
<i>Personality Traits</i>				
Extraversion	6.08	1.34	2.00	9.00
Emotional stability	6.30	1.31	2.00	10.00
Emotional reactions				
Happiness	10.31	4.29	4.00	20.00
Worry	7.53	3.64	4.00	20.00
Anger	6.24	3.11	3.00	15.00
Guilt	7.72	4.11	4.00	20.00
Sadness	3.48	2.03	2.00	10.00
<i>Attributions</i>				
External attributions	6.56	1.33	5.00	10.00
Positive attributions	70.23	17.03	25.00	125.00
Liking	5.29	2.21	2.00	10.00
<i>Behavioural Reactions</i>				
Compliance	5.96	2.14	2.00	10.00
Move against	8.37	2.05	3.00	12.00
Move away	6.88	3.08	3.00	15.00

*Full Sample N=744*

*F3: One-way ANOVA for mean scores on the psychometric scales by position*

Psychometric Scale	Occupation Position	N	Mean	SD	F	p
Familiarity	Upper Management	54	2.70	1.21	1.035	.388
	Middle Management	107	2.86	1.22		
	Junior Management	212	2.63	1.16		
	Supervisor	212	2.69	1.11		
	Administrative Staff	159	2.82	1.16		
Social media use	Upper Management	54	24.70	8.58	.104	.981
	Middle Management	107	25.24	7.27		
	Junior Management	212	25.30	6.86		
	Supervisor	212	25.33	7.13		
	Administrative Staff	159	25.06	7.38		
Group identity	Upper Management	54	11.56	3.01	1.472	.209
	Middle Management	107	11.64	3.08		
	Junior Management	212	11.60	3.02		
	Supervisor	212	11.09	2.71		
	Administrative Staff	159	11.72	2.59		
Power distance	Upper Management	54	16.98	5.00	2.094	.080
	Middle Management	107	17.94	4.94		
	Junior Management	212	17.95	5.11		
	Supervisor	212	18.89	4.85		
	Administrative Staff	157	17.86	5.39		
Collectivism	Upper Management	54	19.78	7.04	10.458	.000
	Middle Management	107	18.48	5.46		
	Junior Management	212	17.52	4.59		
	Supervisor	212	16.53	3.93		
	Administrative Staff	157	15.97	3.67		
Global identity	Upper Management	54	16.35	5.55	2.831	.024
	Middle Management	106	17.32	4.11		
	Junior Management	212	17.65	4.46		
	Supervisor	212	16.32	4.43		
	Administrative Staff	158	16.72	4.48		

*Continued, One-way ANOVA results comparing mean scores on the psychometric scales by position*

<b>Psychometric Scale</b>	<b>Occupation Position</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Local identity	Upper Management	54	11.63	5.57	1.224	.299
	Middle Management	106	11.10	4.01		
	Junior Management	212	11.11	4.33		
	Supervisor	212	11.97	4.35		
	Administrative Staff	158	11.41	4.50		
Organisational trust	Upper Management	54	21.91	5.48	.543	.704
	Middle Management	105	21.84	4.63		
	Junior Management	212	21.80	4.86		
	Supervisor	212	21.42	4.48		
	Administrative Staff	156	21.22	4.52		
Dispositional trust	Upper Management	54	21.96	5.78	1.813	.124
	Middle Management	105	22.57	5.08		
	Junior Management	212	21.81	4.74		
	Supervisor	212	21.26	4.74		
	Administrative Staff	156	21.16	4.54		
Violation perception	Upper Management	54	22.93	8.42	1.060	.375
	Middle Management	107	23.34	7.09		
	Junior Management	212	24.15	7.11		
	Supervisor	212	24.63	6.86		
	Administrative Staff	159	24.43	6.91		
Happiness	Upper Management	54	10.52	4.50	.719	.579
	Middle Management	107	10.82	4.20		
	Junior Management	212	10.40	4.56		
	Supervisor	212	10.17	4.03		
	Administrative Staff	159	9.98	4.26		
Extraversion	Upper Management	54	5.93	1.45	.292	.883
	Middle Management	106	6.15	1.35		
	Junior Management	212	6.09	1.27		
	Supervisor	212	6.10	1.36		
	Administrative Staff	158	6.04	1.38		



*Continued, One-way ANOVA results comparing mean scores on the psychometric scales by position*

Psychometric Scale	Occupation Position	N	Mean	SD	F	p
Emotional stability	Upper Management	54	6.11	1.45	.410	.801
	Middle Management	106	6.33	1.32		
	Junior Management	212	6.32	1.27		
	Supervisor	212	6.26	1.19		
	Administrative Staff	158	6.35	1.44		
Worry	Upper Management	54	8.19	4.62	1.416	.227
	Middle Management	107	7.79	4.13		
	Junior Management	212	7.62	3.43		
	Supervisor	212	7.52	3.60		
	Administrative Staff	159	7.01	3.19		
Anger	Upper Management	54	7.07	3.95	2.664	.032
	Middle Management	107	6.39	3.19		
	Junior Management	212	6.45	3.10		
	Supervisor	212	6.15	2.93		
	Administrative Staff	159	5.67	2.91		
Guilt	Upper Management	54	8.17	4.51	.336	.853
	Middle Management	107	7.57	3.93		
	Junior Management	212	7.54	3.85		
	Supervisor	212	7.83	4.51		
	Administrative Staff	159	7.75	3.88		
Sadness	Upper Management	54	3.72	2.37	1.307	.266
	Middle Management	107	3.69	2.25		
	Junior Management	212	3.58	2.07		
	Supervisor	212	3.38	1.89		
	Administrative Staff	159	3.24	1.88		
External attributions	Upper Management	54	6.54	1.48	.855	.491
	Middle Management	107	6.76	1.42		
	Junior Management	212	6.58	1.29		
	Supervisor	212	6.49	1.23		
	Administrative Staff	159	6.49	1.37		

*Continued, One-way ANOVA results comparing mean scores on the psychometric scales by position*

Psychometric Scale	Occupation Position	N	Mean	SD	F	p
Positive attributions	Upper Management	54	71.46	23.39	2.198	.068
	Middle Management	107	73.76	18.35		
	Junior Management	212	69.73	16.77		
	Supervisor	212	68.08	16.06		
	Administrative Staff	159	70.97	14.76		
Liking	Upper Management	54	5.35	2.55	2.717	.029
	Middle Management	107	5.72	2.26		
	Junior Management	212	5.13	2.23		
	Supervisor	212	5.02	2.08		
	Administrative Staff	159	5.56	2.13		
Compliance	Upper Management	54	6.02	2.24	.033	.998
	Middle Management	107	6.00	2.24		
	Junior Management	211	5.98	2.04		
	Supervisor	211	5.94	2.17		
	Administrative Staff	159	5.94	2.17		
Move against	Upper Management	54	7.67	2.36	4.047	.003
	Middle Management	107	8.27	2.19		
	Junior Management	212	8.51	1.92		
	Supervisor	212	8.68	1.96		
	Administrative Staff	159	8.07	2.04		
Move away	Upper Management	54	6.85	3.84	1.049	.381
	Middle Management	107	7.15	2.92		
	Junior Management	212	6.72	2.73		
	Supervisor	212	7.12	3.13		
	Administrative Staff	159	6.58	3.26		

*F4: One-way ANOVA for mean psychometric scales scores by cultural identity*

Psychometric Scale	Cultural Identity	N	Mean	SD	F	p
Social media use	British	56	23.98	6.65	0.57	0.82
	American	63	24.78	7.44		
	Indian	58	24.83	6.84		
	Chinese	31	24.23	6.08		
	Asian (Non-Chinese)	95	24.67	7.05		
	Arab	414	25.67	7.50		
	Irish	5	25.80	3.19		
	German	16	25.25	6.68		
	Russian	4	26.50	8.74		
	Turkish	2	23.00	1.41		
Group identity	British	56	11.27	2.72	1.22	0.28
	American	63	12.06	2.23		
	Indian	58	11.07	2.66		
	Chinese	31	10.81	2.99		
	Asian (Non-Chinese)	95	11.45	2.81		
	Arab	414	11.48	3.00		
	Irish	5	13.80	1.79		
	German	16	11.81	2.43		
	Russian	4	13.25	1.71		
	Turkish	2	11.50	3.54		
Power distance	British	56	17.70	5.23	0.78	0.63
	American	63	17.00	4.57		
	Indian	58	18.52	4.17		
	Chinese	31	18.42	5.48		
	Asian (Non-Chinese)	95	18.71	5.08		
	Arab	412	18.18	5.25		
	Irish	5	17.40	2.51		
	German	16	17.69	5.31		
	Russian	4	19.50	4.20		
	Turkish	2	14.00	1.41		

*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Collectivism	British	56	13.14	0.64	22.90	0.00
	American	63	12.79	1.26		
	Indian	58	16.86	1.73		
	Chinese	31	16.00	0.00		
	Asian (Non-Chinese)	95	16.78	1.17		
	Arab	412	18.88	5.50		
	Irish	5	14.00	0.00		
	German	16	14.00	0.00		
	Russian	4	15.00	0.00		
	Turkish	2	15.00	0.00		
Global identity	British	56	15.82	5.05	1.72	0.08
	American	63	17.76	4.24		
	Indian	58	17.05	4.67		
	Chinese	31	15.32	4.84		
	Asian (Non-Chinese)	95	16.31	4.25		
	Arab	412	17.17	4.47		
	Irish	5	19.80	1.64		
	German	16	16.63	5.10		
	Russian	4	18.75	3.30		
	Turkish	2	15.50	3.54		
Local identity	British	56	12.16	5.04	1.16	0.32
	American	63	10.73	4.10		
	Indian	58	11.93	4.36		
	Chinese	31	12.06	4.02		
	Asian (Non-Chinese)	95	11.05	4.24		
	Arab	412	11.49	4.50		
	Irish	5	8.40	4.16		
	German	16	11.75	3.96		
	Russian	4	8.75	1.71		
	Turkish	2	15.00	4.24		

*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Organisational trust	British	56	20.39	4.90	1.59	0.12
	American	63	21.51	3.92		
	Indian	58	21.86	4.21		
	Chinese	31	21.55	3.59		
	Asian (Non-Chinese)	95	20.69	4.22		
	Arab	409	21.88	4.98		
	Irish	5	26.40	6.77		
	German	16	21.50	4.35		
	Russian	4	21.25	2.06		
	Turkish	2	21.00	1.41		
Dispositional trust	British	56	20.30	4.12	1.74	0.08
	American	63	20.67	4.30		
	Indian	58	21.67	4.75		
	Chinese	31	22.00	3.57		
	Asian (Non-Chinese)	95	20.99	4.68		
	Arab	409	22.11	5.08		
	Irish	5	24.20	7.29		
	German	16	20.38	4.75		
	Russian	4	20.75	3.86		
	Turkish	2	20.00	1.41		
Violation perception	British	56	25.21	6.93	1.71	0.08
	American	63	26.56	6.54		
	Indian	58	24.52	5.89		
	Chinese	31	24.29	7.32		
	Asian (Non-Chinese)	95	24.02	6.96		
	Arab	414	23.57	7.29		
	Irish	5	28.40	9.79		
	German	16	24.13	7.68		
	Russian	4	19.75	4.50		
	Turkish	2	27.50	3.54		

*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Happiness	British	56	9.23	3.52	1.88	0.05
	American	63	9.68	3.97		
	Indian	58	9.53	4.31		
	Chinese	31	9.71	3.55		
	Asian (Non-Chinese)	95	10.12	4.26		
	Arab	414	10.84	4.45		
	Irish	5	8.80	5.07		
	German	16	9.44	4.24		
	Russian	4	8.50	2.08		
	Turkish	2	7.50	2.12		
Extraversion	British	56	5.77	1.40	1.23	0.27
	American	63	6.00	1.28		
	Indian	58	6.03	1.35		
	Chinese	31	6.26	1.44		
	Asian (Non-Chinese)	95	5.94	1.54		
	Arab	412	6.12	1.28		
	Irish	5	6.80	1.92		
	German	16	6.75	1.34		
	Russian	4	6.25	0.50		
	Turkish	2	6.50	0.71		
Emotional stability	British	56	5.89	1.19	1.42	0.18
	American	63	6.54	1.19		
	Indian	58	6.59	1.53		
	Chinese	31	6.39	1.56		
	Asian (Non-Chinese)	95	6.35	1.34		
	Arab	412	6.24	1.26		
	Irish	5	6.60	1.95		
	German	16	6.50	1.32		
	Russian	4	6.75	1.71		
	Turkish	2	6.50	0.71		

*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Worry	British	56	7.09	3.42	1.80	0.06
	American	63	7.41	3.54		
	Indian	58	7.57	3.38		
	Chinese	31	6.48	2.64		
	Asian (Non-Chinese)	95	7.36	3.47		
	Arab	414	7.80	3.84		
	Irish	5	9.00	4.12		
	German	16	5.38	1.82		
	Russian	4	4.50	1.00		
	Turkish	2	10.00	1.41		
Anger	British	56	6.20	2.89	1.89	0.05
	American	63	6.16	2.98		
	Indian	58	6.21	2.82		
	Chinese	31	5.10	2.57		
	Asian (Non-Chinese)	95	6.24	3.17		
	Arab	414	6.37	3.22		
	Irish	5	9.40	1.52		
	German	16	4.69	2.70		
	Russian	4	4.25	1.89		
	Turkish	2	8.50	0.71		
Guilt	British	56	6.88	3.87	1.25	0.26
	American	63	8.05	4.42		
	Indian	58	8.71	4.14		
	Chinese	31	8.03	4.52		
	Asian (Non-Chinese)	95	6.98	3.45		
	Arab	414	7.73	4.18		
	Irish	5	8.60	4.34		
	German	16	8.94	4.12		
	Russian	4	7.50	1.73		
	Turkish	2	9.00	7.07		

*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Sadness	British	56	3.34	1.81	1.34	0.21
	American	63	3.24	1.86		
	Indian	58	3.47	2.04		
	Chinese	31	2.81	1.22		
	Asian (Non-Chinese)	95	3.60	2.15		
	Arab	414	3.58	2.11		
	Irish	5	4.00	2.83		
	German	16	2.69	1.25		
	Russian	4	2.00	0.00		
	Turkish	2	5.00	4.24		
External attributions	British	56	6.38	1.38	0.50	0.87
	American	63	6.49	1.52		
	Indian	58	6.67	1.38		
	Chinese	31	6.52	1.09		
	Asian (Non-Chinese)	95	6.52	1.21		
	Arab	414	6.60	1.31		
	Irish	5	5.80	0.84		
	German	16	6.38	1.59		
	Russian	4	7.00	2.16		
	Turkish	2	6.50	0.71		
Positive attributions	British	56	67.89	12.94	3.25	0.00
	American	63	68.98	14.93		
	Indian	58	67.91	15.23		
	Chinese	31	71.42	14.44		
	Asian (Non-Chinese)	95	67.71	15.58		
	Arab	414	72.24	18.12		
	Irish	5	41.80	6.76		
	German	16	65.69	18.48		
	Russian	4	57.50	17.75		
	Turkish	2	60.50	3.54		



*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Liking	British	56	4.66	1.62	1.74	0.08
	American	63	5.05	2.23		
	Indian	58	5.36	2.31		
	Chinese	31	5.39	1.93		
	Asian (Non-Chinese)	95	5.28	2.08		
	Arab	414	5.45	2.29		
	Irish	5	2.60	1.34		
	German	16	5.13	2.39		
	Russian	4	4.75	1.50		
	Turkish	2	4.50	0.71		
Compliance	British	56	5.38	2.14	1.33	0.22
	American	63	5.83	1.85		
	Indian	58	6.31	1.93		
	Chinese	31	6.26	1.77		
	Asian (Non-Chinese)	94	5.88	2.07		
	Arab	413	6.02	2.26		
	Irish	5	5.00	1.00		
	German	16	5.75	2.21		
	Russian	4	7.75	0.50		
	Turkish	2	4.50	2.12		
Move against	British	56	8.64	1.67	0.85	0.57
	American	63	8.38	1.90		
	Indian	58	8.24	2.28		
	Chinese	31	8.52	1.69		
	Asian (Non-Chinese)	95	8.54	1.95		
	Arab	414	8.25	2.13		
	Irish	5	9.00	1.87		
	German	16	8.81	2.29		
	Russian	4	9.75	1.50		
	Turkish	2	10.00	0.00		

*Continued, One-way ANOVA comparing mean psychometric scales scores by cultural identity*

<b>Psychometric Scale</b>	<b>Cultural Identity</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Move away	British	56	6.77	3.02	1.57	0.12
	American	63	6.35	3.14		
	Indian	58	6.62	2.93		
	Chinese	31	6.94	2.98		
	Asian (Non-Chinese)	95	6.56	2.80		
	Arab	414	7.11	3.17		
	Irish	5	9.20	3.83		
	German	16	6.25	2.67		
	Russian	4	3.50	1.00		
	Turkish	2	6.50	0.71		

*F5: One-way ANOVA for mean psychometric scales scores by region*

<b>Psychometric Scale</b>	<b>Region</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Social media use	Africa	55	28.31	7.03	3.286	.006
	Asia	537	25.12	7.25		
	Central America And Caribbean	8	28.50	6.55		
	Europe	90	24.62	6.57		
	North America	47	23.36	7.46		
	South America	7	23.00	8.27		
Group identity	Africa	55	10.96	3.08	1.421	.214
	Asia	537	11.45	2.94		
	Central America And Caribbean	8	11.63	2.72		
	Europe	90	11.60	2.58		
	North America	47	12.38	2.09		
	South America	7	10.86	2.12		
Power distance	Africa	53	18.77	5.45	1.196	.309
	Asia	537	18.23	5.09		
	Central America And Caribbean	8	14.63	4.47		
	Europe	90	17.59	5.02		
	North America	47	17.96	4.81		
	South America	7	17.71	4.27		
Collectivism	Africa	53	11.25	5.13	87.658	.000
	Asia	537	18.96	4.08		
	Central America And Caribbean	8	15.00	0.00		
	Europe	90	13.49	0.75		
	North America	47	11.96	0.20		
	South America	7	14.57	0.53		
Global identity	Africa	55	17.62	4.99	1.708	.130
	Asia	535	16.83	4.41		
	Central America And Caribbean	8	18.50	2.83		
	Europe	90	16.22	4.98		
	North America	47	18.19	4.38		
	South America	7	17.57	3.82		

*Continued, One-way ANOVA results comparing mean psychometric scales scores by region*

<b>Psychometric Scale</b>	<b>Region</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Local identity	Africa	55	11.22	5.40	.623	.683
	Asia	535	11.51	4.28		
	Central America And Caribbean	8	9.50	3.59		
	Europe	90	11.70	4.65		
	North America	47	11.21	4.80		
	South America	7	9.86	2.79		
Organisational trust	Africa	53	21.77	4.63	.388	.857
	Asia	534	21.65	4.77		
	Central America And Caribbean	8	21.88	1.64		
	Europe	90	20.97	4.94		
	North America	47	21.64	4.03		
	South America	7	22.29	3.50		
Dispositional trust	Africa	53	20.21	5.72	3.114	.009
	Asia	534	22.03	4.83		
	Central America And Caribbean	8	20.50	2.14		
	Europe	90	20.40	4.43		
	North America	47	21.11	4.60		
	South America	7	22.57	2.99		
Violation perception	Africa	55	25.91	7.38	3.868	.002
	Asia	537	23.49	7.06		
	Central America And Caribbean	8	28.00	7.46		
	Europe	90	25.34	7.33		
	North America	47	26.68	5.91		
	South America	7	23.14	4.34		
Happiness	Africa	55	10.62	4.16	2.997	.011
	Asia	537	10.57	4.41		
	Central America And Caribbean	8	10.38	3.38		
	Europe	90	9.18	3.62		
	North America	47	8.91	3.99		
	South America	7	12.14	3.98		
Extraversion	Africa	55	5.93	1.36	.921	.467
	Asia	535	6.12	1.33		
	Central America And Caribbean	8	5.63	1.19		
	Europe	90	6.13	1.42		
	North America	47	5.85	1.40		
	South America	7	5.57	0.79		

*Continued, One-way ANOVA results comparing mean psychometric scales scores by region*

<b>Psychometric Scale</b>	<b>Region</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Emotional stability	Africa	55	6.09	0.95	1.570	.166
	Asia	535	6.31	1.35		
	Central America And Caribbean	8	6.88	0.83		
	Europe	90	6.12	1.26		
	North America	47	6.62	1.31		
	South America	7	6.00	1.15		
Worry	Africa	55	7.60	3.79	1.576	.164
	Asia	537	7.67	3.69		
	Central America And Caribbean	8	8.00	4.50		
	Europe	90	6.98	3.35		
	North America	47	6.57	3.11		
	South America	7	9.29	3.59		
Anger	Africa	55	6.45	3.48	.188	.967
	Asia	537	6.25	3.13		
	Central America And Caribbean	8	6.63	3.25		
	Europe	90	6.13	2.96		
	North America	47	5.94	2.85		
	South America	7	6.29	2.93		
Guilt	Africa	55	7.75	4.30	.596	.703
	Asia	537	7.71	4.08		
	Central America And Caribbean	8	8.13	5.54		
	Europe	90	7.54	4.01		
	North America	47	7.66	4.10		
	South America	7	10.29	4.75		
Sadness	Total	744	7.72	4.11	.897	.483
	Africa	55	3.44	2.13		
	Asia	537	3.55	2.07		
	Central America And Caribbean	8	3.38	1.60		
	Europe	90	3.29	1.87		
	North America	47	2.98	1.69		
	South America	7	3.71	2.43		

*Continued, One-way ANOVA results comparing mean psychometric scales scores by region*

<b>Psychometric Scale</b>	<b>Region</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
External attributions	Africa	55	6.64	1.38	1.051	.387
	Asia	537	6.58	1.27		
	Central America And Caribbean	8	6.00	0.93		
	Europe	90	6.36	1.44		
	North America	47	6.77	1.67		
	South America	7	6.29	0.76		
Positive attributions	Africa	55	67.49	17.79	2.810	.016
	Asia	537	71.47	17.39		
	Central America And Caribbean	8	72.13	11.17		
	Europe	90	65.17	14.95		
	North America	47	67.89	15.30		
	South America	7	75.57	11.28		
Liking	Africa	55	5.45	2.18	2.453	.032
	Asia	537	5.43	2.25		
	Central America And Caribbean	8	5.25	2.05		
	Europe	90	4.64	1.84		
	North America	47	4.83	2.24		
	South America	7	5.14	2.27		
Compliance	Africa	55	5.64	2.31	1.620	.152
	Asia	535	6.08	2.16		
	Central America And Caribbean	8	6.13	1.64		
	Europe	90	5.49	2.12		
	North America	47	6.02	1.70		
	South America	7	5.29	2.14		
Move against	Africa	55	8.58	1.63	1.222	.297
	Asia	537	8.27	2.14		
	Central America And Caribbean	8	8.13	1.64		
	Europe	90	8.69	1.85		
	North America	47	8.77	1.80		
	South America	7	8.14	2.04		
Move away	Africa	55	6.42	2.50	1.136	.340
	Asia	537	7.03	3.14		
	Central America And Caribbean	8	6.13	2.17		
	Europe	90	6.68	2.99		
	North America	47	6.19	2.94		
	South America	7	7.00	5.00		

*F6: One-way ANOVA for mean psychometric scales scores by sector*

Psychometric Scale	Sector	N	Mean	SD	F	p
Social media use	Hotel Services	250	25.15	7.44	.772	.463
	Oil, Chemical & Gas Industry	236	24.81	7.15		
	Water & Power	258	25.62	7.09		
Group identity	Hotel Services	250	12.01	2.60	6.623	.001
	Oil, Chemical & Gas Industry	236	11.30	2.86		
	Water & Power	258	11.14	3.03		
Power distance	Hotel Services	250	17.97	5.07	.453	.636
	Oil, Chemical & Gas Industry	234	18.03	5.00		
	Water & Power	258	18.37	5.17		
Collectivism	Hotel Services	250	17.13	4.49	.349	.706
	Oil, Chemical & Gas Industry	234	17.09	4.89		
	Water & Power	258	17.41	4.78		
Global identity	Hotel Services	250	17.04	4.31	.180	.835
	Oil, Chemical & Gas Industry	236	16.79	4.70		
	Water & Power	256	16.95	4.56		
Local identity	Hotel Services	250	11.30	4.18	.286	.751
	Oil, Chemical & Gas Industry	236	11.60	4.63		
	Water & Power	256	11.48	4.49		
Organisational trust	Hotel Services	249	21.86	4.52	.885	.413
	Oil, Chemical & Gas Industry	234	21.29	4.72		
	Water & Power	256	21.59	4.84		
Dispositional trust	Hotel Services	249	21.93	4.86	1.337	.263
	Oil, Chemical & Gas Industry	234	21.23	4.78		
	Water & Power	256	21.71	4.87		
Violation Perception	Hotel Services	250	24.39	6.97	.366	.694
	Oil, Chemical & Gas Industry	236	23.84	7.14		
	Water & Power	258	24.17	7.20		

*Continued, One-way ANOVA results comparing mean psychometric scales scores by sector*

Psychometric Scale	Sector	N	Mean	SD	F	p
Happiness	Hotel Services	250	10.08	4.40	.647	.524
	Oil, Chemical & Gas Industry	236	10.34	4.30		
	Water & Power	258	10.52	4.19		
Extraversion	Hotel Services	250	6.08	1.35	.155	.857
	Oil, Chemical & Gas Industry	236	6.34	1.28		
	Water & Power	256	6.39	1.34		
Emotional stability	Hotel Services	250	6.35	1.32	.446	.640
	Oil, Chemical & Gas Industry	236	6.50	1.30		
	Water & Power	256	6.54	1.35		
Worry	Hotel Services	250	7.70	3.73	4.323	.014
	Oil, Chemical & Gas Industry	236	6.97	3.35		
	Water & Power	258	7.88	3.76		
Anger	Hotel Services	250	6.24	3.12	5.919	.003
	Oil, Chemical & Gas Industry	236	5.73	2.95		
	Water & Power	258	6.69	3.18		
Guilt	Hotel Services	250	7.43	3.82	.944	.390
	Oil, Chemical & Gas Industry	236	7.91	4.12		
	Water & Power	258	7.83	4.36		
Sadness	Hotel Services	250	3.55	2.10	3.975	.019
	Oil, Chemical & Gas Industry	236	3.18	1.85		
	Water & Power	258	3.67	2.10		
External attributions	Hotel Services	250	6.54	1.38	.780	.459
	Oil, Chemical & Gas Industry	236	6.64	1.34		
	Water & Power	258	6.49	1.25		
Positive attributions	Hotel Services	250	70.56	16.05	.098	.907
	Oil, Chemical & Gas Industry	236	70.26	16.67		
	Water & Power	258	69.89	18.28		
Liking	Hotel Services	250	5.35	2.22	.165	.848
	Oil, Chemical & Gas Industry	236	5.28	2.18		
	Water & Power	258	5.24	2.23		



*Continued, One-way ANOVA results comparing mean psychometric scales scores by sector*

<b>Psychometric Scale</b>	<b>Sector</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>p</b>
Compliance	Hotel Services	250	6.09	2.03	1.836	.160
	Oil, Chemical & Gas Industry	234	6.06	2.18		
	Water & Power	258	5.76	2.20		
Move against	Hotel Services	250	8.04	2.07	4.868	.008
	Oil, Chemical & Gas Industry	236	8.57	1.93		
	Water & Power	258	8.50	2.10		
Move away	Hotel Services	250	7.18	3.47	25.735	.000
	Oil, Chemical & Gas Industry	236	5.75	2.40		
	Water & Power	258	7.60	2.95		

## Appendix G: Study 2 Correlations

Spearman's rank correlation coefficient for the entire sample (N=744)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1 No. of email sent																											
2 No. of email received	.728**																										
3 Use of social media	.411**	.443**																									
4 Familiarity	.047	.017	.075*																								
5 Group identity	.191*	.202*	.120*	.033																							
6 Power Distance	-.211**	-.159**	-.194**	-.049	-.393**																						
7 Collectivism	-.009	.009	.044	.095**	.011	.025																					
8 Extraversion	.069	.084*	.044	.006	.161**	-.174**	.048																				
9 Agreeableness	.076*	.014	-.056	-.021	.118**	-.124**	-.009	.442**																			
10 Conscientiousness	.065	.022	.045	-.054	.225**	-.208**	-.034	.483**	.538**																		
11 Emotional Stability	.024	.049	-.014	-.014	.161**	-.133**	-.016	.478**	.525**	.463**																	
12 Openness	.102*	.086*	.017	-.063	.156**	-.185**	-.047	.488**	.567**	.608**	.486**																
13 Global identity	.226*	.178**	.253**	.097*	.332**	-.431**	.006	.159*	.098**	.192*	.162*	.204**															
14 Local identity	-.197**	.132**	-.192**	.032	-.310**	.425**	.016	-.187**	-.122**	-.229**	-.135**	-.201**	-.550**														
15 Organisational Trust	.209**	.182**	.199**	.083*	.171**	-.218**	.072*	.131*	.048	.109*	.085*	.111*	.341**	-.250**													
16 Dispositional Trust	.069	.115**	.072*	.149**	.181**	-.194**	.259**	.054	-.062	.024	.047	.018	.310**	-.196**	.396**												
17 Violation perception	-.110*	-.042*	-.102*	-.399**	-.094*	.146**	-.173**	-.029	.009	.036	-.012	.075*	-.157**	.047*	-.187**	-.270**											
18 Happiness	.165**	.149**	.182**	.323**	-.006	-.082*	.149**	.045	.025	-.090*	.012	.032	.154**	-.104**	.232**	.212**	-.463**										
19 Worry	-.095**	-.077**	.066*	.110**	-.170**	.157**	.150**	-.118**	-.152**	-.156**	-.129**	-.170**	-.105**	.188**	-.086**	.022	.010	.103**									
20 Anger	-.055	-.039	.076*	-.069	-.173**	.155**	.103*	-.132**	-.158**	-.128**	-.117**	-.128**	-.093**	.109*	-.057**	-.014*	.214**	-.042*	.708**								
21 Guilt	-.020	.011	.015	.009	.069	-.035	.000	-.007	-.001	.003	.010	-.015	.063	-.028	.048	.076*	-.063	.025	-.028	-.043**							
22 Sadness	-.061	-.068	.077*	.047	-.237**	.215**	.158**	-.137**	-.178**	-.185**	-.117**	-.177**	-.165**	.218**	-.136**	-.042	.088**	.073**	.772**	.686**	-.004**						
23 Positive Attributions	.101*	.124**	.131**	.505**	.123**	-.126**	.170**	.037	-.011	-.028	.005	-.009	.225**	-.039	.208**	.268**	-.469**	.507**	.060	-.085*	.005	.037					
24 Liking	.067	.052	.112**	.651**	.115**	-.156**	.107**	.022	.006	-.011	.003	-.075*	.138**	-.005	.141**	.226**	-.526**	.387**	.069	-.143**	.008	.011	.630**				
25 Compliance	.172**	.158**	.166**	.311**	.226**	-.268**	.078*	.107*	.046	.068	.085*	.074*	.277**	-.192**	.300**	.242**	-.497**	.489**	-.168**	-.289**	.084**	-.228**	.419**	.450**			
26 Move Against	-.103**	-.097**	-.118**	-.255**	-.238**	.275**	-.072*	-.074*	-.081*	-.078*	-.105**	-.038	-.206**	.146**	-.202**	-.225**	.337**	-.227**	.006	.076*	-.040	.080*	-.284**	-.348**	-.368**		
27 Move Away	.014	.054	.160**	-.032	-.148**	.154**	.143**	-.053	-.121**	-.096**	-.055	-.079**	-.011	.076*	.043	.054	.109**	.114**	.383**	.457**	-.010	.426**	.038	-.141**	-.142**	.044	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Appendix H: Interaction of sender's culture with other characteristic variables

*H1: Interaction between sender's culture and global identity*

*(Global identity: high/low) x 2 (sender's culture: same/different) between groups ANOVA*

Sender's culture	Global identity		Violation	Happiness	Worry	Anger	Guilt	Sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	23.77	112	74	633	778	322	651	7295	54	644	822	682
		N	171	171	171	171	171	171	171	171	171	171	171	171
		SD	751	458	362	34	41	199	129	1865	238	231	205	332
	Low	M	24.96	954	819	659	72	389	662	6589	51	54	855	697
		N	209	209	209	209	209	209	209	209	209	209	209	209
		SD	634	366	35	284	362	206	139	1365	197	19	212	302
Different	High	M	22.38	1108	732	606	821	337	65	7453	566	662	806	713
		N	178	178	178	178	178	178	178	178	178	177	178	178
		SD	743	463	409	335	434	215	131	1959	237	21	189	333
	Low	M	25.19	965	713	594	775	335	66	6844	504	555	86	659
		N	184	184	184	184	184	184	184	184	184	183	184	184
		SD	691	41	327	287	436	187	131	1479	208	202	208	263
		F	2.443	0.132	3.433	0.679	0.039	5.395	0.006	0.157	0.99	0.003	0.526	2.31
		p	0.119	0.716	0.064	0.41	0.844	0.02	0.937	0.692	0.32	0.957	0.469	0.129

H2: Interaction between sender's culture and local identity

(Local identity: high/low) x 2 (sender's culture: same/different) ANOVA

Sender's culture	Local identity		Violation	Happiness	Worry	Anger	Guilt	Sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	24.28	9.71	8.61	6.79	7.44	4.04	6.63	68.42	5.3	5.5	8.52	7.17
		N	194	194	194	194	194	194	194	194	194	194	194	194
		SD	6.34	3.78	3.46	2.81	3.79	2.03	1.4	13.72	2.06	1.95	2.21	3.13
	Low	M	24.56	10.9	7.02	6.14	7.48	3.12	6.51	69.74	5.17	6.25	8.27	6.62
		N	186	186	186	186	186	186	186	186	186	186	186	186
		SD	7.47	4.48	3.51	3.35	3.92	1.97	1.28	18.9	2.28	2.29	1.97	3.17
Different	High	M	24.06	10.09	7.55	5.94	8.07	3.53	6.71	71.1	5.36	5.95	8.47	6.86
		N	174	174	174	174	174	174	174	174	174	174	174	174
		SD	6.68	4.29	3.43	2.85	4.42	2.02	1.3	15.05	2.1	1.94	2.08	2.76
	Low	M	23.57	10.6	6.92	6.05	7.88	3.21	6.4	71.74	5.34	6.19	8.21	6.86
		N	188	188	188	188	188	188	188	188	188	186	188	188
		SD	7.83	4.54	3.9	3.34	4.3	2	1.3	19.63	2.38	2.29	1.93	3.22
		F	0.54	1.2	3.36	2.74	0.14	4.1	0.91	0.07	0.11	2.64	0	1.46
		p	0.461	0.274	0.067	0.098	0.707	0.043	0.341	0.785	0.745	0.105	0.997	0.228

H3: Interaction between sender's culture and dispositional trust

(Dispositional trust: high/low) x 2 (sender's culture: same/different) ANOVA

Sender's culture	Dispositional Trust		Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	2322	11.14	7.93	6.37	7.55	3.47	6.56	72.6	5.66	6.39	7.86	7.05
		N	195	195	195	195	195	195	195	195	195	195	195	195
		SD	6.94	4.43	3.8	3.24	3.83	2.07	1.37	16.47	2.31	2.1	2.31	3.33
	Low	M	2565	9.42	7.75	6.57	7.34	3.72	6.59	65.52	4.8	5.32	8.97	6.75
		N	184	184	184	184	184	184	184	184	184	184	184	184
		SD	6.65	3.68	3.33	2.95	3.88	2.04	1.32	15.48	1.91	2.08	1.67	2.97
Different	High	M	2222	10.84	7.35	6.07	8.15	3.42	6.65	75.05	5.71	6.31	8.11	7.02
		N	195	195	195	195	195	195	195	195	195	194	195	195
		SD	6.87	4.63	4	3.27	4.39	2.21	1.34	18.29	2.39	2.08	2.02	3.18
	Low	M	2582	9.72	7	5.9	7.82	3.38	6.42	67.16	4.92	5.77	8.62	6.65
		N	165	165	165	165	165	165	165	165	165	164	165	165
		SD	7.32	4.1	3.24	2.92	4.32	1.75	1.26	15.82	2	2.15	1.96	2.78
		F	13	0.89	0.1	0.65	0.04	1.58	1.56	0.11	0.05	2.9	4.02	0.02
		p	0.255	0.347	0.75	0.42	0.838	0.21	0.212	0.741	0.825	0.089	0.045	0.887

H4: Interaction between sender's culture and organisational trust

(Organizational trust: high/low) x 2 (sender's culture: same/different) ANOVA

Sender's culture	Organisational Trust	Violation	Happiness	Worry	Anger	Guilt	Sadness	External Attributions	Positive Attributions	Liking	Compliance	Move Against	Move Away
Same	High	M	238	1125	768	634	742	34	652	7234	538	642	804
		N	199	199	199	199	199	199	199	199	199	199	199
		SD	721	436	383	325	39	205	141	1716	227	216	206
	Low	M	2506	926	802	661	749	38	663	6565	51	527	879
		N	180	180	180	180	180	180	180	180	180	180	180
		SD	649	369	326	293	381	204	127	147	203	199	207
Different	High	M	2319	1094	719	621	812	329	651	7278	553	645	819
		N	200	200	200	200	200	200	200	200	200	199	200
		SD	718	461	4	33	434	209	133	1856	23	205	183
	Low	M	2471	956	719	573	786	344	659	6976	513	558	854
		N	160	160	160	160	160	160	160	160	160	159	160
		SD	738	408	323	284	438	191	129	1628	218	213	22
		F	006	098	042	259	03	07	001	218	014	078	168
		p	08	0322	0518	0108	0586	0404	0911	014	0705	0379	0995

H5: Interaction between sender's culture and extraversion

(Extraversion: high/low) x 2 (sender's culture: same/different) ANOVA

Sender's culture	Extraversion		Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution ns	Positive Attribution ns	Liking	Compliance	Move Against	Move Away
Same	High	M	24.32	10.44	7.62	6.37	7.54	3.4	6.57	69.57	5.31	6.06	8.32	6.71
		N	278	278	278	278	278	278	278	278	278	278	278	278
		SD	7.17	4.23	3.55	3.22	3.98	1.97	1.33	17.05	2.2	2.23	2.07	3.12
	Low	M	24.7	9.87	8.42	6.75	7.25	4.09	6.57	67.7	5.04	5.35	8.6	7.43
		N	102	102	102	102	102	102	102	102	102	102	102	102
		SD	6.14	4.03	3.59	2.75	3.5	2.19	1.4	14.68	2.07	1.85	2.16	3.22
Different	High	M	23.67	10.53	7.09	5.72	7.92	3.26	6.44	71.6	5.44	6.17	8.32	6.82
		N	272	272	272	272	272	272	272	272	272	270	272	272
		SD	7.42	4.56	3.66	3.07	4.32	1.99	1.24	18.63	2.31	2.13	1.99	3.05
	Low	M	24.23	9.83	7.62	6.83	8.13	3.66	6.87	70.96	5.07	5.79	8.39	6.96
		N	90	90	90	90	90	90	90	90	90	90	90	90
		SD	6.93	3.94	3.79	3.08	4.47	2.06	1.44	13.9	2.04	2.09	2.07	2.87
		F	0.02	0.03	0.2	2.03	0.54	0.75	3.67	0.19	0.07	0.82	0.34	1.31
		p	0.875	0.865	0.659	0.155	0.464	0.395	0.056	0.666	0.786	0.366	0.559	0.253

H6: Interaction between sender's culture and emotional stability

(Emotional stability: high/low) x 2 (sender's culture: same/different) ANOVA

Sender's culture	Emotional Stability		Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	24.69	10.32	7.47	6.47	7.51	3.43	6.52	68.69	5.09	5.83	8.28	6.74
		N	140	140	140	140	140	140	140	140	140	140	140	140
		SD	6.9	4.28	3.41	3.29	3.91	1.98	1.35	1.73	2.27	2.27	2.03	3.33
	Low	M	24.26	10.27	8.05	6.47	7.43	3.68	6.6	69.29	5.33	5.89	8.47	7
		N	240	240	240	240	240	240	240	240	240	240	240	240
		SD	6.92	4.13	3.65	2.99	3.82	2.09	1.34	1.597	2.11	2.09	2.13	3.05
	High	M	23.55	10.49	6.73	5.46	7.8	3.11	6.39	72.42	5.35	6.33	8.04	6.95
		N	121	121	121	121	121	121	121	121	121	121	121	121
		SD	7.48	4.51	3.42	2.81	4.11	1.74	1.19	1.85	2.48	2.16	1.88	3.12
Different	Low	M	23.94	10.29	7.47	6.27	8.06	3.49	6.63	70.94	5.34	5.95	8.48	6.81
		N	241	241	241	241	241	241	241	241	241	239	241	241
		SD	7.21	4.38	3.81	3.22	4.48	2.13	1.35	1.708	2.13	2.1	2.05	2.95
		F	0.55	0.05	0.09	2.84	0.28	0.18	0.64	0.63	0.51	1.85	0.64	0.69
		p	0.457	0.82	0.765	0.093	0.597	0.674	0.423	0.427	0.477	0.174	0.425	0.407



# Appendix I: Interaction of sender's status with other characteristic variables

I1: Interaction between sender's status and global identity

(Global identity: high/low) x 3 (sender's status: higher/same/lower) ANOVA

Sender's Status	Global Id		Violation	Happiness	Worry	Anger	Guilt	sadness	Positive Attributions	Liking	Compliance	Move Against	Move Away
Same	High	M	22.5	10.91	6.2	4.97	8.6	2.66	73.04	5.6	6.3	8.47	5.82
		N	104	104	104	104	104	104	104	104	104	104	104
		SD	7.2	4.23	2.75	2.6	4.45	1.38	18.32	2.22	2.12	1.72	2.43
	Low	M	23.43	9.64	7.33	5.83	7.18	3.55	68.07	5.34	5.67	8.16	6.87
		N	109	109	109	109	109	109	109	109	109	109	109
		SD	6.23	4.14	3.45	2.74	3.68	1.99	14.5	2.14	1.96	2.14	3.09
High	High	M	22.92	11.27	7.37	6.01	7.93	3.3	73.12	5.54	6.81	7.98	7.39
		N	132	132	132	132	132	132	132	132	131	132	132
		SD	7.75	4.81	3.96	3.26	4.27	2.08	20.02	2.37	2.14	2.07	3.53
	Low	M	25.3	9.61	7.8	6.34	7.57	3.66	66.63	5.08	5.59	8.77	6.76
		N	145	145	145	145	145	145	145	145	145	145	145
		SD	6.79	3.57	3.45	2.82	4.09	1.91	12.83	2.01	1.94	2.24	2.77
Low	High	M	23.73	11.21	8.41	7.52	7.52	3.87	75.17	5.48	6.42	8.01	7.56
		N	113	113	113	113	113	113	113	113	113	113	113
		SD	7.45	4.71	4.32	3.66	3.92	2.41	18.85	2.53	2.34	2.04	3.53
	Low	M	26.11	9.53	7.86	6.58	7.55	3.68	66.77	4.85	5.19	8.69	6.77
		N	139	139	139	139	139	139	139	139	138	139	139
		SD	6.49	3.97	3.42	2.98	4.14	2.07	15.44	1.93	1.95	1.87	2.75
		F	0.803	0.167	3.17	5.585	1.876	4.101	0.612	0.412	1.596	5.178	6.384
		p	0.448	0.846	0.043	0.004	0.154	0.017	0.542	0.662	0.203	0.006	0.002

I2: Interaction between sender's status and local identity

(Local identity: high/low) x 3 (sender's status: higher/same/lower) ANOVA

Sender's Status	Local Id		Violation	Happiness	Worry	Anger	Guilt	sadness	Positive Attributions	Liking	Compliance	Move Against	Move Away
Same	High	M	23.61	9.7	7.53	5.9	7.79	3.59	68.48	5.39	5.62	8.25	6.66
		N	114	114	114	114	114	114	114	114	114	114	114
		SD	6.51	4.11	3.37	2.59	4.09	1.96	15.26	2.18	1.97	2.13	2.98
	Low	M	22.24	10.91	5.92	4.85	7.97	2.58	72.82	5.55	6.38	8.37	6.01
		N	99	99	99	99	99	99	99	99	99	99	99
		SD	6.93	4.28	2.68	2.73	4.18	1.35	17.87	2.19	2.1	1.73	2.62
High	High	M	23.93	9.95	8.24	6.4	7.82	3.83	69.52	5.39	5.92	8.69	7.1
		N	135	135	135	135	135	135	135	135	135	135	135
		SD	6.4	3.78	3.47	2.7	4.25	2.04	12.17	2.03	1.83	2.25	2.88
	Low	M	24.39	10.82	6.99	5.98	7.67	3.17	69.92	5.21	6.4	8.11	7.02
		N	142	142	142	142	142	142	142	142	141	142	142
		SD	8.16	4.68	3.82	3.32	4.11	1.92	20.5	2.35	2.35	2.1	3.42
Low	High	M	25	10	8.52	6.84	7.61	3.96	71.03	5.18	5.56	8.5	7.28
		N	119	119	119	119	119	119	119	119	119	119	119
		SD	6.56	4.25	3.57	3.2	3.99	2.12	15.85	2.03	2.07	2.03	3.01
	Low	M	25.08	10.54	7.74	7.14	7.48	3.59	70.09	5.08	5.91	8.28	6.98
		N	133	133	133	133	133	133	133	133	132	133	133
		SD	7.44	4.51	4.07	3.45	4.09	2.32	18.94	2.41	2.34	1.93	3.26
		F	1.075	0.348	0.781	2.89	0.114	1.519	1.464	0.357	0.56	1.743	0.513
		p	0.342	0.706	0.458	0.056	0.892	0.22	0.232	0.7	0.571	0.176	0.599

13: Interaction between sender's status and dispositional trust

(Dispositional trust: high/low) x 3 (sender's status: higher/same/lower) ANOVA

Sender's Status	Dispositional Trust	Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	2181	10.69	6.45	5	7.81	2.84	6.59	72.28	5.66	6.36	7.94
		N	118	118	118	118	118	118	118	118	118	118	118
		SD	6.33	4.39	2.97	2.51	4.07	1.62	1.26	16.28	2.27	2.02	2.12
	Low	M	2443	9.73	7.19	5.93	7.95	3.46	6.71	68.28	5.22	5.51	8.77
		N	95	95	95	95	95	95	95	95	95	95	95
		SD	6.95	3.96	3.37	2.86	4.21	1.91	1.43	16.86	2.06	2.02	1.61
High	High	M	2243	11.17	7.69	6.12	7.86	3.41	6.5	73.39	5.87	6.64	7.89
		N	148	148	148	148	148	148	148	148	148	148	148
		SD	7.03	4.77	3.98	3.15	4.29	2.09	1.26	17.04	2.33	2.03	2.3
	Low	M	2629	9.47	7.43	6.22	7.64	3.57	6.5	65.63	4.64	5.58	9
		N	129	129	129	129	129	129	129	129	129	128	129
		SD	7.16	3.45	3.34	2.9	4.04	1.88	1.24	15.97	1.83	2.11	1.9
Low	High	M	2392	11.06	8.71	7.5	7.88	4.06	6.74	75.81	5.48	6.02	8.13
		N	124	124	124	124	124	124	124	124	124	123	124
		SD	7.2	4.38	4.29	3.55	4.01	2.44	1.54	18.83	2.45	2.17	2.07
	Low	M	2614	9.53	7.51	6.54	7.2	3.5	6.37	65.48	4.81	5.5	8.63
		N	125	125	125	125	125	125	125	125	125	125	125
		SD	6.69	4.26	3.23	3.06	4.07	1.97	1.23	14.26	1.96	2.22	1.88
		F	1.01	0.46	4.17	5.63	0.56	5.11	2.21	2.09	2.17	1.11	1.48
		p	0.365	0.63	0.016	0.004	0.569	0.006	0.11	0.125	0.115	0.331	0.418

14: Interaction between sender's status and organisational trust

(Organizational trust: high/low) x 3 (sender's status: higher/same/lower) ANOVA

Sender's Status	Organisational Trust		Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	22.35	11.06	6.67	5.28	8.15	2.91	6.62	70.78	5.51	6.43	8.22	6.6
		N	125	125	125	125	125	125	125	125	125	125	125	125
		SD	6.95	4.41	3.21	2.66	4.04	1.66	1.34	16.76	2.23	1.97	1.78	2.84
	Low	M	23.86	9.13	6.93	5.6	7.48	3.41	6.67	70.1	5.4	5.33	8.43	6.01
		N	88	88	88	88	88	88	88	88	88	88	88	88
		SD	6.33	3.67	3.11	2.76	4.23	1.9	1.33	16.52	2.13	2.02	2.17	2.79
High	High	M	23.72	11.17	7.53	6.35	7.79	3.42	6.5	72.67	5.44	6.6	8.03	7.55
		N	144	144	144	144	144	144	144	144	144	144	144	144
		SD	7.19	4.62	4.17	3.33	4.41	2.1	1.31	17.87	2.19	2.08	2.09	3.36
	Low	M	24.79	9.53	7.61	5.98	7.73	3.56	6.5	66.64	5.15	5.65	8.82	6.52
		N	133	133	133	133	133	133	133	133	133	132	133	133
		SD	7.48	3.73	3.11	2.67	3.91	1.87	1.19	15.4	2.2	2.09	2.24	2.86
Low	High	M	24.35	11.04	8.05	7.15	7.37	3.68	6.42	74.15	5.41	6.26	8.1	7.19
		N	130	130	130	130	130	130	130	130	130	129	130	130
		SD	7.34	4.43	4.15	3.49	3.91	2.32	1.45	18.81	2.45	2.25	1.95	3.36
	Low	M	25.78	9.47	8.17	6.87	7.72	3.87	6.7	66.77	4.86	5.22	8.69	7.05
		N	119	119	119	119	119	119	119	119	119	119	119	119
		SD	6.61	4.19	3.48	3.18	4.2	2.15	1.34	14.97	1.95	2.04	1.99	2.94
		F	0.07	0.12	0.04	0.85	0.88	0.52	0.76	2.46	0.57	0.09	1.23	1.38
		p	0.933	0.887	0.959	0.43	0.414	0.597	0.47	0.086	0.565	0.917	0.294	0.252

15: Interaction between sender's status and extraversion

(Extraversion: high/low) x 3 (sender's status: higher/same/lower) ANOVA

Sender's Status	Extraversion		Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	23.03	10.38	6.65	5.27	7.87	3	6.69	71.45	5.52	6.08	8.27	6.37
		N	164	164	164	164	164	164	164	164	164	164	164	164
		SD	6.86	4.32	3.13	2.77	4.12	1.69	1.35	17.21	2.25	2.09	1.87	2.86
	Low	M	22.8	9.88	7.2	5.88	7.9	3.51	6.49	67.31	5.29	5.63	8.45	6.33
		N	49	49	49	49	49	49	49	49	49	49	49	49
		SD	6.31	3.88	3.3	2.44	4.17	1.99	1.29	14.21	1.95	1.92	2.2	2.76
High	High	M	23.41	10.64	7.17	5.66	7.82	3.15	6.37	70.51	5.41	6.5	8.34	6.82
		N	194	194	194	194	194	194	194	194	194	193	194	194
		SD	7.68	4.4	3.6	2.94	4.27	1.84	1.17	18.14	2.26	2.12	2.12	3.07
	Low	M	25.94	9.82	8.59	7.4	7.55	4.29	6.82	67.9	5.05	5.39	8.53	7.63
		N	83	83	83	83	83	83	83	83	83	83	83	83
		SD	6.19	3.96	3.76	2.92	3.95	2.14	1.37	13.61	2.03	1.93	2.36	3.33
Low	High	M	25.42	10.41	8.15	7.1	7.52	3.81	6.49	69.89	5.21	5.75	8.35	7.05
		N	192	192	192	192	192	192	192	192	192	191	192	192
		SD	7.08	4.46	3.86	3.41	4.06	2.24	1.34	18.19	2.25	2.26	2.06	3.25
	Low	M	23.83	9.88	7.98	6.68	7.62	3.63	6.73	72.62	4.87	5.73	8.5	7.35
		N	60	60	60	60	60	60	60	60	60	60	60	60
		SD	6.76	4.15	3.84	3.06	3.98	2.19	1.58	15.16	2.17	2.08	1.67	2.8
		F	4.65	0.09	2.52	6.55	0.12	5.56	2.77	1.98	0.04	3.57	0.01	0.92
		p	0.01	0.915	0.081	0.002	0.887	0.004	0.063	0.139	0.959	0.029	0.994	0.397

16: Interaction between sender's status and emotional stability

(Emotional stability: high/low) x 3 (sender's status: higher/same/lower) ANOVA

Sender's Status	Emotional Stability		Violation	Happiness	Worry	Anger	Guilt	sadness	External Attribution	Positive Attribution	Liking	Compliance	Move Against	Move Away
Same	High	M	23.09	10.39	6.63	5.25	7.83	3.05	6.62	71.67	5.37	6.12	8.37	6.43
		N	76	76	76	76	76	76	76	76	76	76	76	76
		SD	6.94	4.35	2.98	2.88	4.25	1.77	1.26	18.85	2.44	2.08	2.02	3.02
	Low	M	22.91	10.19	6.86	5.5	7.9	3.15	6.66	69.85	5.52	5.9	8.28	6.31
		N	137	137	137	137	137	137	137	137	137	137	137	137
		SD	6.62	4.16	3.27	2.61	4.07	1.79	1.37	15.29	2.03	2.05	1.92	2.73
High	High	M	23.39	10.84	7.05	5.52	7.84	3.12	6.28	71.22	5.45	6.5	7.81	6.61
		N	109	109	109	109	109	109	109	109	109	109	109	109
		SD	7.56	4.42	3.61	2.81	4.09	1.78	1.17	17.81	2.37	2.15	1.94	3.22
	Low	M	24.67	10.11	7.95	6.61	7.68	3.73	6.65	68.76	5.2	5.95	8.77	7.35
		N	168	168	168	168	168	168	168	168	168	167	168	168
		SD	7.19	4.17	3.73	3.11	4.24	2.1	1.28	16.32	2.08	2.08	2.27	3.11
Low	High	M	26.34	9.76	7.74	7.45	7.17	3.74	6.57	68.01	4.7	5.37	8.49	7.57
		N	76	76	76	76	76	76	76	76	76	76	76	76
		SD	6.45	4.33	3.54	3.3	3.61	2.04	1.42	17.14	2.23	2.34	1.89	3.36
	Low	M	24.48	10.51	8.27	6.81	7.7	3.78	6.55	71.63	5.32	5.91	8.34	6.93
		N	176	176	176	176	176	176	176	176	176	175	176	176
		SD	7.2	4.41	3.98	3.34	4.2	2.31	1.4	17.62	2.22	2.14	2.02	3.04
		F	1.77	0.51	4.8	0.42	1.47	1.61	2.13	2.29	4	5.72	3.07	1.77
		p	0.171	0.603	0.009	0.655	0.232	0.201	0.12	0.102	0.019	0.003	0.047	0.171

## Bibliography

- Aberson, C.L., & Haag, S. C. (2007). Contact, perspective taking, and anxiety as predictors of stereotype endorsement, explicit attitudes, and implicit attitudes. *Group Processes & Intergroup Relations*, 10(2), 179–201.
- Adams, M. (2004). Whatever will be, will be: Trust, fate and the reflexive self. *Culture & Psychology*, 10(4), 387–408.
- Al-Saggaf, Y., & Williamson, K. (2004). Online communities in Saudi Arabia: Evaluating the impact on culture through online semi-structured interviews. *Forum Qualitative Sozialforschung*, 5(3), 1–16.
- Al-Zahrani, S. S. A., & Kaplowitz, S. A. (1993). Attributional biases in individualistic and collectivistic cultures: A comparison of Americans with Saudis. *Social Psychology Quarterly*, 56(3), 223–233.
- AlAfnan, M. A. (2014). Politeness in business writing: The effects of ethnicity and relating factors on email communication. *Open Journal of Modern Linguistics*, 4, 275–289.
- Alexander, P., Dawson, M. C., & Ichharam, M. (2006). Globalization and new identities: a view from the middle. *South Africa: Jacana Media*. pp. 241
- Allik, J., & Realo, A. (1997). Emotional experience and its relation to the Five-Factor Model in Estonian. *Journal of Personality*, 65, 625–647.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Almunajjed, M. (1997). *Women in Saudi Arabia Today*. New York: St. Martin's Press.  
<http://dx.doi.org/10.1057/9780230373105>
- Amichai-Hamburger, Y. (2008). Potential and promise of online volunteering. *Computers in Human Behavior*, 24(2), 544–562.
- Anderson, C., Beer, J. S., Chatman, J. A., Srivastava, S., & Spataro, S. E. (2006). Knowing your Place: Self-Perceptions of Status in Face-to-Face Groups. *Journal of Personality and Social Psychology*, 91, 6, 1094–1110.
- Arnett, J. J. (2002). The psychology of globalization. *American Psychological Association*, 57(10), 774–783. doi:10.1037//0003-066X.57.10.774
- Ashkanasy, N., Hartel, C., & Daus, C. (2002). Diversity and emotion: The new frontiers in organizational behavior research. *Journal of Management*, 28(3), 307–338.

- Ashleigh, M. J., Higgs, M., & Dulewicz, V. (2012). A new propensity to trust scale and its relationship with individual well-being: Implications for HRM policies and practices. *Human Resource Management Journal*, 2(4), 360–376.
- Ata, A., Bastian, B., & Lusher, D. (2009). Intergroup contact in context: The mediating role of social norms and group-based perceptions on the contact–prejudice link. *International Journal of Intercultural Relations*, 33(6), 498–506.
- Atwater, L. E., & Waldman D. A. (2008). *Leadership, feedback and the open communication gap*. New York: Taylor & Francis Group, LLC.
- Axtell, C., Moser, K. S., & McGoldrick, J. (2012). Perceived norm violations in email communications: The role of in-group bias and emotional reactions. Conference Proceedings from: *The Academy of Management Annual Meeting 2012*, Boston.
- Baggs, J., Schmitt, M., Mushlin, A., Mitchell, P., Eldredge, D., Oakes, D., & Hutson, A. (1999). Association between nurse-physician collaboration and patient outcomes in 3 intensive care units. *Critical Care Medicine*, 27(9), 1991–1998.
- Baker, T. L. (1994). *Doing social research* (2nd ed.). New York: McGraw-Hill Inc.
- Bakker, A. B., Van Der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2002). The relationship between the Big Five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology*, 146(1), 1–15.
- Barak, M. (2000). Beyond affirmative action: Toward a model of diversity and organisational inclusion. *Administration in Social Work*, 23(3/4), 47–68.
- Barlett, P. C., & Anderson, C. A. (2012). Direct and indirect relations between the Big 5 personality traits and aggressive and violent behaviour. *Personality and Individual Differences*, 52(8), 870–875.
- Barley, S., Debra, E., & Meyerson, D. (2011). E-mail as a source and symbol of stress. *Organization Science*, 22(4), 887–906.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bazarova, N. N., & Walther, J. B. (2008). Attributions in virtual groups: Distances and behavioral variations in computer-mediated discussions. *Small Group Research*, 40(2), 138–162.
- Berger, J., Rosenholtz, S. J., & Zelditch, M. J. (1980). Status organizing processes. *Annual Review of Sociology*, 6, 479–508.



- Berkos, K. M., Allen, T. H., Kearney, P., & Plax, T. G. (2001). When norms are violated: Imagined interactions as processing and coping mechanisms. *Communication Monographs*, 68(3), 289–300.
- Berry, G. R. (2011). Enhancing effectiveness on virtual teams: Understanding why traditional team skills are insufficient. *Journal of Business Communication*, 48(2), 187–202.
- Bigley, G. A., & Pearce, J. L. (1998). Straining for shared meaning in organizational science: Problems of trust and distrust. *Academy of Management Review*, 23, 405–421.
- Bishop, J. (2009). Enhancing the understanding of genres of web-based communities: The role of the ecological cognition framework. *International Journal of Web-Based Communities*, 5(1), 4–17.
- Bjørge, A. K. (2007). Power distance in English lingua franca email communication. *International Journal of Applied Linguistics*, 17(1), 60–80.
- Blanchard, A. L. (2008). Testing a model of sense of virtual community. *Computers in Human Behavior*, 24, 2107–2123.
- Bolkan, S., & Holmgren, J. L. (2012). “You are such a great teacher and I hate to bother you but. . .”: Instructors’ perceptions of students and their use of email messages with varying politeness strategies. *Communication Education*, 61(3), 253–270.
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch’s (1952b, 1956) line judgment task. *Psychological Bulletin*, 119(1), 111–137.
- Branscombe, N., & Wann, D. (1992). Physiological arousal and reactions to out-group members during competitions that implicate an important social identity. *Aggressive Behaviour*, 8(2), 85–93.
- Branzei, O., Vertinsky, I., & Camp, R. D. (2007). Culture-contingent signs of trust in emergent relationships. *Organizational Behavior and Human Decision Processes*, 104(1), 61–82.
- Breakwell, G. M., Hammond, S., Fife-Schaw, C., & Smith, J. A. (Eds.). (2006). *Research methods in psychology* (3rd ed.). London: Sage.
- Brewer, M. B., & Gardner, W. (1996). Who is this “we”? Levels of collective identity and self-representations. *Journal of Personality and Social Psychology*, 71, 83–93.
- Brislin, R. (1993). *Understanding culture’s influence on behavior*. Fort Worth, TX: Harcourt Brace Jovanovick.

- British Embassy Riyadh. (2013, September 26). *UK Minister of State for Trade and Investment visits Saudi Arabia*. Retrieved from gov.uk: <https://www.gov.uk/government/world-location-news/uk-minister-of-state-for-trade-and-investment-visits-saudi-arabia>
- British Psychological Society. (2000). *BPS*. Retrieved from <http://www.bps.org.uk/>
- Brown, H. G., Poole, M. S., & Rodgers, T. L. (2004). Interpersonal traits, complementarity and trust in virtual collaboration. *Journal of Management Information Systems*, 20(4), 115–137.
- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology*, 30, 745–778.
- Brown, R., Duck, J., & Jimmieson, N. (2014). E-mail in the workplace: The role of stress appraisals and normative response pressure in the relationship between e-mail stressors and employee strain. *International Journal of Stress Management*, 21(4), 325–347.
- Byron, K. (2008). Carrying too heavy a load? The communication and miscommunication of emotion by email. *The Academy of Management Review*, 33(2), 309–327.
- Cardon. P. W., (2008). A Critique of Hall's Contexting Model A Meta-Analysis of Literature on Intercultural Business and Technical Communication. *Journal of Business and Technical Communication*, 22, 399–428
- Carlson, J. R., & Zmud, R. W., (1999). Channel expansion theory and the experiential nature of media richness perceptions. *Academy of Management Journal*, 48, 153–170.
- Carpenter, L. (2016). The development of cultural competence in social work practice and education. *Master of Social Work Clinical Research Papers*, Paper 568. Retrieved from [http://sophia.stkate.edu/msw\\_papers/568](http://sophia.stkate.edu/msw_papers/568)
- Carr, C. T., & Stefaniak, C. (2012). Sent from my iPhone: The medium and message as cues of sender professionalism in mobile telephony. *Journal of Applied Communication Research*, 40(4), 403–424.
- Castano, E., Paladino, M. P., Coull, A., & Yzerbyt, V. Y. (2002). Protecting the ingroup stereotype: Ingroup identification and the management of deviant ingroup members. *British Journal of Social Psychology*, 41(3), 365–385.
- Chee, W. C., Harrison, G. L., McKinnon, J. L., & Wu, A. (1999). Cultural influences on informal information sharing in Chinese and Anglo-American organizations: An exploratory study. *Accounting, Organizations and Society*, 24(7), 561–582.
- Chen, C. E. (2006). The development of email literacy: From writing to peers to writing to authority figures. *Language Learning & Technology*, 10(2), 35–55.

- Chen, S., & Lee, K. (2008). The role of personality traits and perceived values in persuasion: An elaboration likelihood model perspective on online shopping. *Social Behavior & Personality: An International Journal*, 36, 1379–1400.
- Cheney, G., Christensen, L. T., Zorn, T. E., & Ganesh, S. (2004). *Organizational communication in an age of globalization: Issues, reflections, & practices*. Prospect Heights, IL: Waveland Press.
- Cheshin, A., Kim, Y., Bos, N. D., Nan, N., & Olson, J. S. (2013). Emergence of differing electronic communication norms within partially distributed teams. *Journal of Personnel Psychology*, 12(1), 7–21. doi: 10.1027/1866–5888/a000076
- Cheshin, A., Rafaeli, A., & Bos, N. (2011). Anger and happiness in virtual teams: Emotional influences of text and behaviour on others' affect in the absence of non-verbal cues. *Organizational Behavior and Human Decision Processes*, 116(1), 2–16.
- Cheung, C. M. K., & Lee, M. K. O. (2001). Trust in internet shopping: Instrument development and validation through classical and modern approaches. *Journal of Global Information Management*, 9(3), 23–35.
- Cho, H., & Lee, J.-S. (2008). Collaborative information seeking in intercultural computer-mediated communication groups: Testing the influence of social context using social network analysis. *Communication Research*, 35(4), 548–573.
- Christ, O., Mansel, J., Wagner, U., Asbrock, F., Schleuter, E., & Pettigrew, T. F., (2006). *Emotions as determinants of prejudice and discrimination*. Manuscript under review.
- Church, A. T. (2000). Culture and personality: Toward an integrated cultural trait psychology. *Journal of Personality*, 68(4), 653–703.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, 1(3), 98–101.
- Collett, J., Childs, E. (2011). Minding the gap: meaning, affect, and the potential shortcomings of vignettes. *Social Science Research*, 40, 513–522.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, 92(4), 909–927.

- Condit, C. (1993). The critic as empath: Moving away from totalizing theory. *Western Journal of Communication*, 57(2), 178–190.
- Connaughton, S. L., & Shuffler, M. (2007). Multinational and multicultural distributed teams. *Small Group Research*, 38(3), 387–412.
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personal and Social Psychology*, 38(4), 668–678.
- Costa, P. T., & McCrae, R. R. (1992). NEO PI-R professional manual: Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI). Odessa, FL: *Psychological Assessment Resources*.
- Costa, P. T., Terracciano, A., & McCrae, R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81(2), 322–331.
- Costarelli, S. (2005). Short communication affective responses to own violations of ingroup norms: The moderating role of norm salience. *European Journal of Social Psychology*, 35(3), 425–435.
- Coyle-Shapiro, J. A. M. (2002). A psychological contract perspective on organizational citizenship behavior. *Journal of Organizational Behavior*, 23, 927–946. doi: 10.1002/job.173
- Cramton, C. D. (2001). The mutual knowledge problem and its consequences for dispersed collaboration. *Organization Science*, 12(3), 346–371.
- Cramton, C. D., Orvis, K. L., Wilson, J. M. (2007). Situational invisibility and attribution in distributed collaborations. *Journal of Management*, 33(4), 525–546.
- Crisp, R. & Turner, R. (2011). Cognitive adaptation to the experience of social and cultural diversity. *Psychological Bulletin*, 137, 242–266.
- Curtis, K., Tzannes, A. & Rudge, T. (2011). How to talk to doctors: A guide for effective communication. *International Nursing Review*, 58, 13–20.
- Cusack, B., & Parry, D. (2014). Customizing doctor-nurse communications. *Australian eHealth Informatics and Security Conference*, 3, 4–13.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural determinants. *Management Science*, 32(5), 554–571.
- Dahl, S. (2004). Intercultural research: *The current state of knowledge*. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=658202](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=658202)

- Deery, S. J., Iverson, R. D., & Walsh, J. T. (2006). Toward a better understanding of psychological contract breach: A study of customer service employees. *Journal of Applied Psychology*, 91, 166–175. doi:10.1037/0021-9010.91.1.166
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124(2), 197–229.
- Derks, D., Fischer, A. H., & Bos, A. E. (2008). The role of emotion in computer-mediated communication: A review. *Computers in Human Behavior*, 24(3), 766–785.
- Derks, D., & Bakker, A. (2010). The impact of e-mail communication on organizational life. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 4(1).
- Dietz, G., & Den Hartog, D. (2006). Measuring trust inside organisations. *Personnel Review*, 35, 557–588. doi:10.1108/00483480610682299
- Dietz, G., Gillespie, N., & Chao, G. T. (2010). Unravelling the complexities of trust and culture. In M. N. K. Saunders, D. Skinner, G. Dietz, N. Gillespie, & R. J. Lewicki (Eds.), *Organizational trust: A cultural perspective* (pp. 3–41). New York: Cambridge University Press.
- Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science*, 12(4), 450–467.
- Doney, P., Cannon, J., & Mullen, M. (1998). Understanding the influence of national culture on the development of trust. *Academy of Management Review*, 23(3), 491–512.
- Dorfman, P. W., & Howell, J. (1988) Dimensions of National Culture and Effective Leadership Patterns: Hofstede Revisited. In J. Cheng & R. Peterson (Eds.), *Advances in International Comparative Management* (Vol. 3, pp. 127–150). UK: Emerald Group Publishing Limited.
- Drori, G. S., Hollerer, M. A., Walgenbach, P., (2014). *Global themes and local variations in organization and management*. UK: Routledge.
- Dubrovsky, V. J., Kiesler, S., & Sethna, B.N.(1991). The equalization phenomenon: Status effects in computer-mediated and face-to-face decision-making groups. *Human Computer Interaction*, 6, 119–146.
- Dulac, T., Coyle-Shapiro, J. A-M., Henderson, D. J. and Wayne, S. J. (2008). Not all responses to breach are the same: The interconnection of social exchange and psychological contract processes in organizations. *Academy of Management Journal*, 51(6), 1079–1098.
- Duran, R. L., Kelly, L., & Keaton, J. A. (2005). College faculty use and perceptions of electronic mail to communicate with students. *Communication Quarterly*, 53(2), 59–76.

- Eid, M., & Diener, E. (2001). Norms for experiencing emotions in different cultures: Inter- and intranational differences. *Journal of Personality and Social Psychology* 81(5), 869–885.
- Erez, M., & Gati, E. (2004). A dynamic, multi-level model of culture: From the micro level of the individual to the macro level of a global culture. *Applied Psychology: An International Review*, 53(4), 583–598.
- Erez, M., & Shokef, E. (2008). The culture of global organizations. In P. Smith, M. Peterson, & D. Thomas (Eds.), *Handbook of cross-cultural management research* (pp. 285–300). London: Sage Publications.
- Erez, M., Lisak, A., Harush, R., Glikson, E., Nouri, R., & Shokef, E. (2013). Going global: Developing management students' cultural intelligence and global identity in culturally diverse virtual teams. *Academy of Management Learning & Education*, 12(3), 330–355.
- Eysenck, M. W., & Keane, M. T. (2010). *Cognitive psychology: A student's handbook*. New York: Psychology Press.
- Farris, G. F., Senner, E. E., & Butterfield, D. A. (1973). Trust, culture and organisational behaviour. *Industrial Relations*, 12, 144–157.
- Field, A. P. (2013). *Discovering statistics using SPSS* (5th ed.). London: Sage Publications.
- Fine, M. (1991). New voices in the work place: Research directions in multinational communication. *Journal of Business Communication*, 28(3), 259–275.
- Fineman, S. (2008). *The emotional organization: Passions and power*. Malden, MA: Blackwell.
- Fiske, A.P. (2002). Using individualism and collectivism to compare cultures – A critique of the validity and measure of the constructs: comment on Oyserman et al. (2002). *Psychological Bulletin*, 128(1), 78–88.
- Fitzsimmons, S. R. (2013). Multicultural employees: A framework for understanding how they contribute to organisations. *Academy of Management Review*, 38(4), 525–549.
- Foral, P. A., Turner, P. D., Monaghan, M. S., Walters, R. W., Merkel, J. J., Lipschultz, J. H., & Lenz, T. L. (2010). Faculty and student expectations and perceptions of e-mail communication in a campus and distance doctor of pharmacy program. *American Journal of Pharmaceutical Education*, 74(10), 1–10.
- Fox, N. & Mathers, N. (1997). Empowering research: statistical power in general practice research. *Family Practice*, 14, 324–329.
- Francis, L., Loudon, S., & Rutledge, C. (2004). Burnout among Roman Catholic parochial clergy in England and Wales: Myth or reality? *Review of Religious Research*, 46, 5–19.

- Frijda, N. (1986). *The emotions*. Cambridge: Cambridge University Press.
- Frijda, N. H., & Mesquita, B. (1995). The social roles and functions of emotions. In S. Kitayama & H. R. Markus (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 51–87). Washington, DC: American Psychological Association.
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57, 212–228.
- Fujimoto, Y., Bahfen, N., Fermelise, J., & Hartel, C. E. J. (2007). The global village: Online cross-cultural communication and HRM. *Cross Cultural Management*, 14(1), 7–22.
- Fulmer, C. A., & Gelfand, M. J. (2012). At what level (and in whom) we trust: Trust across multiple organizational levels. *Journal of Management*, 38(4), 1167–1230.
- Garcia-Prieto, P., Bellard, E., & Schneider, S. (2003). Experiencing diversity, conflict, and emotions in teams. *Applied Psychology: An International Review*, 52(3), 413–440.
- Gardenswartz, L., & Rowe, A., (2001) "Cross-Cultural Awareness." *HRMagazine*, 46, 3, 139–142.
- Garling, P. (2008) *Final Report of the Special Commission of Inquiry: Acute Care Services in NSW Public Hospitals: Overview*. Sydney, Australia: NSW Government.
- Gillies, P. (2011). Dispatches from Saudi Arabia: The case for cross-cultural collaboration. *The Guardian*. Retrieved from <http://www.theguardian.com/higher-education-network/blog/2011/nov/21/saudi-arabia-university-collaboration>
- Glass, G. V., Peckham, P. D., & Sanders, J. R. (1972). Consequences of failure to meet assumptions underlying the fixed effect analyses of variance and covariance. Cited in A. Field, *Discovering Statistics Using SPSS* (5th ed.), London: Sage Publications.
- Glikson, E., & Erez, M. (2013). Emotion display norms in virtual teams. *Journal of Personnel Psychology*, 12(1), 22–32. doi: 10.1027/1866–5888/a000078
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (pp. 7–28). Tilburg, the Netherlands: Tilburg University Press.
- Gomez, C., Kirkman, B. & Shapiro D. (2000). The impact of collectivism and in-group/out-group membership on the evaluation generosity of team members. *Academy of Management Journal*, 43(6), 1097–1106.
- Goodwin, C. (1996). Communalism as a dimension of service relationships. *Journal of Consumer Psychology*, 5(4), 387–415.

- Gordijn, E. H., Yzerbyt, V., Wigboldus, D., & Dumont, M. (2006). Emotional reactions to harmful intergroup behaviour. *European Journal of Social Psychology*, 36, 15–30.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Grant, A. M., & Sumanth, J. J. (2009). Mission possible? The performance of prosaically motivated employees depends on manager trustworthiness. *Journal of Applied Psychology*, 94(4), 927–944. doi:10.1037/a0014391
- Grosse, C. U. (2002). Managing Communication within Virtual Intercultural Teams. *Business Communication Quarterly*, 65(4), 22–37.
- Grudin, J. (2012). Human-computer interaction. In J. Jacko (Ed.), *Human-Computer Interaction Handbook* (3rd ed.), Boca Raton, FL: Taylor and Francis. Retrieved from <http://research.microsoft.com/en-us/um/people/jgrudin/publications/history/hcihandbook3rd.pdf>
- Guirdham, M. (1999). *Communicating across cultures*. London: Macmillan.
- Hailu, F. B., Kassahun, C. W., & Kerie, M. W. (2016). Perceived nurse-physician communication in patient care and associated factors in public hospitals of Jimma Zone, South West Ethiopia: A cross sectional study. *PLoS ONE* 11:e0162264. doi: 10.1371/journal.pone.0162264
- Hall, E. T. (1976). *Beyond culture*. Garden City, NY: Anchor Press.
- Hall, E. T., & Hall, M. R. (1990). *Understanding cultural differences: Keys to success in West Germany, France, and the United States*. Yarmouth, ME: Intercultural Press.
- Hall, E.T.(1992). *The Hidden Dimension*. New York: Anchor Books.
- Hallajian, A., & David, M. K. (2014). “Hello and good day to you dear Dr...” Greetings and closings in supervisors-supervisees email exchanges. *International Conference on Knowledge-Innovation-Excellence: Synergy in Language Research and Practice*, 118, 85–93.
- Hamdan, A. (2005). Women and education in Saudi Arabia: Challenges and achievements. *International Education Journal*, 6(1), 42–64.
- Hammick, J. K., & Lee, M. J. (2014). Do shy people feel less communication apprehension online? The effects of virtual reality on the relationship between personality characteristics and communication outcomes. *Computers in Human Behavior*, 33, 302–310.
- Harris Interactive. (2002). Patient/physician online communication: Many patients want it, would pay for it, and it would influence their choice of doctors and health plans. *Health Care*



News, 2(8). Retrieved from

[http://www.harrisinteractive.com/news/newsletters/healthnews/HI\\_HealthCareNews2002Vol2\\_Iss08.pdf](http://www.harrisinteractive.com/news/newsletters/healthnews/HI_HealthCareNews2002Vol2_Iss08.pdf)

- Harzing, A. W., & Hofstede, G. (1996). Planned change in organizations: The influence of national culture. *Research in the Sociology of Organizations*, 14, 297–340.
- Hassani, S. N. (2006). Locating digital divides at home, work and everywhere else. *Poetics*, 34(4–5), 250–272.
- Hatipog˘lu, C. (2007). (Im)politeness, national and professional identities and context: Some evidence from e-mailed 'Call for Papers'. *Journal of Pragmatics*, 39(4), 760–773.
- Haworth, B. (1999). An analysis of the determinants of student e-mail use. *Journal of Education for Business*, 75(1), 55–59.
- Hermans, H. J. M., & Dimaggio, G. (2007). Self, identity, and globalization in times of uncertainty: A dialogical analysis. *Review of General Psychology*, 11(1), 31–61.
- Hertel, G., Geister, S. & Konradt, U. (2005). Managing virtual teams: A review of current empirical research. *Human Resource Management Review*, 15, 69–95.
- Hertel, G., Schroer, J., Batinic, B., & Naumann, S. (2008). Do shy people prefer to send e-mail? Personality effects on communication media preferences in threatening and nonthreatening situations. *Social Psychology*, 39, 231–243.
- Higa, K., Sheng, O. R. L., Shin, B., & Figueredo, A. J. (2000). Understanding relationships among teleworkers' e-mail usage, e-mail richness perceptions, and e-mail productivity perceptions under a software engineering environment. *IEEE Transactions on Engineering Management*, 47(2), 163–173.
- Hills, H. & Norvell, N. (1991). An examination of hardiness and neuroticism as potential moderators of stress outcomes. *Behavioral Medicine*, 17(1), 31–38.
- Hinds, P. J., & Bailey, D. E. (2003). Out of sight, out of sync: Understanding conflict in distributed teams. *Organization Science*, 14(6), 615–632.
- Hinds, P. J., & Mortensen, M. (2005). Understanding conflict in geographically distributed teams: The moderating effects of shared identity, shared context, and spontaneous communication. *Organization Science*, 16(3), 290–307.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London, UK: McGraw-Hill.

- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hofstede, G., & McCrae, R. R. (2004). Personality and culture revisited: Linking traits and dimensions of culture. *Cross-Cultural Research*, 38(1), 52–88.
- Hogg, M. A., & Abrams, D. (1988). *Social Identification*. London: Routledge.
- Hogg, M. A., & Vaughan, G. (2002). *Social psychology* (3rd Ed.). UK: Prentice Hall.
- Hogg, M. A., Abrams, D., Otten, S., & Hinkle, S. (2004). The social identity perspective: Intergroup relations, self-conception, and small groups. *Small Group Research*, 35, 246–276.
- Holtbrugge, D., Weldon, A., & Rogers, H. (2012). Cultural determinants of email communication styles. *International Journal of Cross Cultural Management*, 13(1) 1–22.
- Hooker, J. (2012). Cultural Differences in Business Communication in Paulston, C. B., Kiesling, S. F., & Rangel, E. S. (Eds.). *The handbook of Intercultural Discourse and Communication*. West Sussex, UK: Blackwell Publishing.
- House of Commons, Foreign Affairs Committee. (2013). *The UK's relations with Saudi Arabia and Bahrain*. London: Houses of Parliament.
- Huang, L., Lu, M. T., & Wong, B. K. (2003). The impact of power distance on email acceptance: Evidence from the PRC. *The Journal of Computer Information Systems*, 44(1), 93–101.
- Huang, W., Watson, R. T., & Wei, K. K. (1998). Can a lean e-mail medium be used for rich communication? A psychological perspective. *European Journal of Information Systems*, 7(4), 269–274.
- Hui, C. H., Triandis, H. C., & Yee, C. (1991). Cultural differences in reward allocation: Is collectivism the explanation? *British Journal of Social Psychology*, 30, 145–157.
- Hwang, Y. (2012). Understanding moderating effects of collectivist cultural orientation on the knowledge sharing attitude by email. *Computers in Human Behavior*, 2169 - 2174.
- IB Psychology (2014, February 1). *Social Identity Theory (Tajfel and Turner, 1979)*. Retrieved from ib-psych.blogspot.co.uk: <http://ib-psych.blogspot.co.uk/2014/02/social-identity-theory-tajfel-1970.html>
- Iedema, R. (2009) *Communication Quality and Safety, Health Care Advisory Council (HCAC) Newsletter*, 8, 8. NSW Health, Sydney, Australia. Retrieved from [http://www.health.nsw.gov.au/resources/initiatives/hcac/pdf/hcac\\_newsletter\\_8.pdf](http://www.health.nsw.gov.au/resources/initiatives/hcac/pdf/hcac_newsletter_8.pdf)

- Jacques, P., Garger, J., Brown, C., & Deale, C. (2009). Personality and virtual reality team candidates: The roles of personality traits, technology anxiety and trust as predictors of perceptions of virtual reality teams. *Journal of Business and Management*, 15(2), 144–155.
- Jadin, T., Gnambs, T., & Batinic, B. (2013). Personality traits and knowledge sharing in online communities. *Computers in Human Behavior*, 29(1), 210–216.
- James, D., Chen, W. W., & Sheu, J. (2005). Comparison of three tobacco survey methods with college students: A case study. *The International Electronic Journal of Health Education*, 8, 119–124.
- Jarvenpaa, S. L., & Leidner, D. E. (1999). Communication and trust in global virtual teams. *Organization Science*, 10(6), 791–815.
- Jarvenpaa, S. L., Knoll, K., & Leidner, D. E. (1998). Is anybody out there? Antecedents of trust in virtual teams. *Journal of Management Information Systems*, 14, 29–64.
- Jarvenpaa, S. L., Shaw, T. R., & Staples, D. S. (2004). Toward contextualized theories of trust: The role of trust in global virtual teams. *Information Systems Research*, 15(3), 250–267.
- Jasso, G. (2001). Studying status: An integrated framework. *American Sociological Review*, 66, 96–124.
- Jerejian, A. C., Reid, C., & Rees, C. S. (2013). The contribution of email volume, email management strategies and propensity to worry in predicting email stress among academics. *Computers in Human Behavior*, 29(3), 991–996.
- Jessmer, S. L., & Anderson, D. (2001). The effect of politeness and grammar on user perceptions of electronic mail. *North American Journal of Psychology*, 3, 331–346.
- Jetten, J., Hogg, M. A., & Mullin, B. A. (2000). Ingroup variability and motivation to reduce subjective uncertainty. *Group Dynamics: Theory, Research, and Practice*, 4, 184–198.
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). New York: Guilford Press.
- Jones, E., Watson, B., Gardner, J., & Galois, C. (2004). Organizational communication: Challenges for the new century. *Journal of Communication*, 54, 722–750.
- Jordan, P.J., Ashkanasy, N.M. and Hartel, C.E.J. (2002). Emotional intelligence as a moderator of emotional and behavioural reactions to job insecurity. *Academy of Management Review*, 27(3), 361–72.

- Kaiser, P., Tullar, W., & McKowen, D. (2000). Student team projects by Internet. *Business Communication Quarterly*, 63(4), 75–82.
- Kaltschmidt, J., Schmitt, S. P. W., Pruszydlo, M. G., & Haefeli, W. E. (2008). Characteristics of effective electronic mail messages distributed to healthcare professionals in a hospital setting. *Journal of the American Medical Informatics Association*, 15, 235–239. doi:10.1197/jamia.M2503
- Kassin, S., Fein, S., & Markus, H. R. (2008). *Social psychology*. Boston: Houghton Mifflin Company.
- Kayworth, T. R., & Leidner, D. E. (2002). Leadership effectiveness in global virtual teams. *Journal of Management Information Systems*, 18, 7–40.
- Kiesler, S., & Cummings, J. N. (2002). What do we know about proximity and distance in work groups? A legacy of research. *Distributed Work*, 57–80.
- Kiffin-Petersen, S. A., and Cordery, J. L. (2003). Trust, individualism and job characteristics as predictors of employee preference for teamwork. *The International Journal of Human Resource Management*, 14(1), 93–116.
- Kim, D, J. (2008). Self-perception-based versus transference-based trust determinants in computer-mediated transactions: A cross-cultural comparison study. *Journal of Management Information Systems*, 24(4), 13–45.
- Knaus, W., Draper, E., Wagner, D., & Zimmerman, J. (1986). An evaluation of outcome from intensive care in major medical centers. *Annals of Internal Medicine*, 104(3), 410–418.
- Koopmann-Holm, B., & Matsumoto, D. (2011). Values and display rules for specific emotions. *Journal of Cross-Cultural Psychology*, 42(3), 355–371.
- Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking “big” personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin*, 136(5), 768–821.
- Kozlowski, S. W. J, & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest*, 7, 77–124.
- Kramer, R. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50, 569–598.
- Kramer, R. M. (2010). Trust barriers in cross-cultural negotiations: a social psychological analysis. In M. Saunders, D. Skinner, G. Dietz, N. Gillespie and R.J. Lewicki (Eds.), *Trust across cultures: Theory and practice* (pp. 42–86). Cambridge, UK: Cambridge University Press.

- Kreiner, D. S., Schnakenberg, S. D., Green, A. G., Costello, M. J., & McClint, A. F. (2002). Effects of spelling errors on the perception of writers. *The Journal of General Psychology*, 129(1), 5–17.
- Landy, F. J., & Conte, J. M. (2010). *Work in the 21st century: An introduction to industrial and organizational psychology*. California: Blackwell Publishing, Ltd.
- Lea, M., & Spears, R. (1992). Paralanguage and social perception in computer-mediated communication. *Journal of Organizational Computing*, 2, 321–341.
- Lea, M., & Spears, R. (1995). Love at first byte? Building personal relationships over computer networks. In J. T. Wood & S. Duck (Eds.), *Understudied relationships: Off the beaten track* (pp. 197–233). Thousand Oaks, CA: Sage.
- Lea, M., Spears, R., & Groot, D. D. (2001). Knowing me, knowing you: Anonymity effects on social identity processes within groups. *Personality and Social Psychology Bulletin*, 27(5), 526–537.
- Lee, E. J. (2007). Character-based team identification and referent informational influence in computer-mediated communication. *Media Psychology*, 9(1), 135–155.
- Lee, M., & Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of Electronic Commerce*, 6(1), 75–91.
- Lee, S. W., & Oysterman, D. (2010). Priming “culture”: Culture as situated cognition. In S. Kitayama & D. Cohen (Eds.), *Handbook of Cultural Psychology* (pp. 255–279). New York: The Guilford Press.
- Levine, T. R., Anders, L. N., Banas, J., Baum, K. L., Endo, K., Hu, A. D. S., & Wong, N. C. H. (2000). Norms, expectations, and deception: A norm violation model of veracity judgments. *Communication Monographs*, 67, 123–137.
- Lewis, C. C., & George, J.F. (2008). Cross-cultural deception in social networking sites and face-to-face communication. *Computers in Human Behavior*, 24, 2945–2964.
- Lin, N. (1999). Social networks and status attainment. *Annual Review of Sociology*, 25, 467–487.
- Link, M., & Mokdad, A. (2005). Alternative modes for health surveillance surveys: An experiment with Web, mail, and telephone. *Epidemiology*, 16 (5), 701–704.
- Lucassen, T., & Schraagen, J. M. (2012). Propensity to trust and the influence of source and medium cues in credibility evaluation. *Journal of Information Science*, 38(6), 566–577.
- Ly, A., (2013). A critical discussion of Hofstede's concept of Power Distance. *SYNAPS*, 28, 51–66.

- Lynn, F. B., Podolny, J. M., & Tao, L. (2009). A sociological (de)construction of the relationship between status and quality. *American Journal of Sociology*, 115, 755–804.
- Macfarlane, A. (1991). *The Origins of English Individualism: The Family Property and Social Transition*. Hoboken, NJ: Wiley-Blackwell.
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79, 602–616.
- Mackie, D., Maitner, A., & Smith, E. (2009). Intergroup emotion theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 285–307). New York, NY: Psychology Press.
- Madden, M., & Jones, S. (2008). Most use e-mail, but say technology is a mixed blessing. *Pew Research Center*. Retrieved from <http://pewresearch.org/pubs/966/networked-workers>
- Maitner, A., Mackie, D., & Smith, E. (2006). Evidence for the regulatory function of intergroup emotion: Emotional consequences of implemented or impeded intergroup action tendencies. *Journal of Experimental Social Psychology*, 42, 720–728.
- Mallett, R.K., Wilson, T.D., & Gilbert, D.T. (2008). Expect the unexpected: Failure to anticipate similarities when predicting the quality of an intergroup interaction. *Journal of Personality and Social Psychology*, 94, 265–277.
- Manojlovich, M. (2010). Nurse/physician communication through a sensemaking lens: Shifting the paradigm to improve patient safety. *Medical Care*, 48(11), 941–6.
- Marcus, A., & Gould, E. W. (2000). Crosscurrents: Cultural dimensions and global Web user-interface design. *Interactions*, 7(4), 32–46.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Markus, H., & Kitayama, S. (1998). The cultural psychology of personality. *Journal of Cross-Cultural Psychology*, 29, 63–87.
- Marques, J., Abrams, D., & Serodio, R. (2001). Being better by being right: Subjective group dynamics and derogation of in-group deviants when generic norms are undermined. *Journal of Personality and Social Psychology*, 81, 436–447.
- Matsumoto, D. (1990). Cultural similarities and differences in display rules. *Motivation and Emotion*, 14, 195–214.
- Matsumoto, D., & Juang, L. (2007). *Culture and psychology* (4th ed.). Belmont, CA: Wadsworth.

- Matsumoto, D., Yoo, S. H., & Fontaine, J. (2008). Mapping expressive differences around the world: The relationship between emotional display rules and individualism versus collectivism. *Journal of Cross-Cultural Psychology*, 39(1), 55–74.
- Matzler, K., Mooradian, T. & Renzl, B. (2006). Who trusts? Personality, trust and knowledge sharing. *Management Learning*, 37(4): 523–540.
- Mayer, R., Davis, J. & Schoorman, F. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–34.
- McAuley, E., Duncan, T., & Russell, D. (1992). Measuring causal attributions: The revised Causal Dimension Scale (CDSII). *Personality and Social Psychology Bulletin*, 18, 566–573.
- McCrae, R. R. (2002). Cross-cultural research on the five-factor model of personality. *Online Readings in Psychology and Culture*, 4(4). <http://dx.doi.org/10.9707/2307-0919.1038>
- McCrae, R. R., & Costa, P. T. (1994). The stability of personality: Observations and evaluations. *Current Directions in Psychological Science*, 3(6), 173–175.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175–215.
- McCrae, R. R., & Terracciano, A. (2005). Personality profiles of cultures: Aggregate personality traits. *Journal of Personality and Social Psychology*, 89(3), 407–425.
- McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the Big Five. *Personality and Social Psychology Bulletin*, 27, 601–610.
- McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an organizing principle. *Organization Science*, 14, 91–103. doi: 10.1287/orsc.14.1.91.12814
- McGoldrick, J. (2011). Do e-mails make you mad, sad, or glad? An investigation of status effects, intergroup relations and reactions to perceived e-mail violations. The University of Sheffield, 1–42.
- McKnight, H., Cummings, L. & Chervany, N. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23, 473–490.
- Menges, J. I., Walter, F., Vogel, B., & Bruch, H. (2011). Transformational leadership climate: Performance linkages, mechanisms, and boundary conditions at the organizational level. *Leadership Quarterly*, 22, 893–909. doi:10.1016/j. leaqua.2011.07.010
- Meyer, B., & Geschiere, P. (1999). *Globalization and identity: Dialects of flow and closure*. Oxford: Blackwell.

- Milkman, K., Akinola, M., & Chugh, D. (2014). What happens before? A field experiment exploring how pay and representation differentially shape bias on the pathway into organizations. *Journal of Applied Psychology, 100*(6), 1678–1712.
- Miller, D. A., Smith, E. R., & Mackie, D. M. (2004). Effects of intergroup contact and political predispositions on prejudice: Role of intergroup emotions. *Group Processes and Intergroup Relations, 7*, 221–237.
- Miller, J. G. (2002). Bringing culture to basic psychological theory – Beyond individualism and collectivism: Comment on Oyserman et al. (2002). *Psychological Bulletin, 128*(1).
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organisational groups. *Academy of Management Review, 21*, 402–33.
- Minsky, B. D., & Marin, D. B. (1999). Why faculty members use e-mail: The role of individual differences in channel choice. *The Journal of Business Communication, 36*(2), 194–217.
- Mockaitis, A. I., Rose, E. L., & Zetting, P. (2012). The power of individual cultural values in global virtual teams. *International Journal of Cross Cultural Management, 12*(2), 193–210.
- Montes, S., & Irving, P. (2008). Disentangling the effects of promised and delivered inducements: Relational and transactional contract elements and the mediating role of trust. *Journal of Applied Psychology, 93*, 1367–1381. doi: 10.1037/a0012851
- Morinagaa, K., Ohtsubob, Y., Yamauchic, K., & Shimadad, Y. (2008). Doctors' traits perceived by Japanese nurses as communication barriers: A questionnaire survey. *International Journal of Nursing Studies, 45*, 740–749
- Moser, K. S. (2013). Only a click away? – What makes virtual meetings, emails and outsourcing successful. In *Management Articles of the Year, Winners 2013* (pp. 25–30). UK: Chartered Management Institute.
- Moser, K., & Axtell, C. (2013). The role of norms in virtual work: A review and agenda for future research. *Journal of Personnel Psychology, 12*(1), 1–6.
- Motallebzadeh, K., Mohsenzadeh, H., & Sobhani, A. (2014). Investigating Iranian university students' emails for pragmatic features. *Procedia - Social and Behavioral Sciences, 98*, 1263–1272.
- Mottet, T. P., Beebe, S. A., Raffeld, P. C., & Pausel, M. L. (2004). The effects of student verbal and nonverbal responses on teachers' liking of students and willingness to comply with student requests. *Communication Quarterly, 52*, 27–38.



- Mullen, B., Brown, R., & Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: an integration. *European Journal of Social Psychology*, 22, 103–22.
- Najeeb, Z. M., Maros, M., & Nor, N. F. M. (2012). Politeness in e-mails of Arab students In Malaysia. *Journal of Language Studies*, 12(1), 125–141.
- Nakagawa, S., & Foster, T. M. (2004). The case against retrospective statistical power analyses with an introduction to power analysis. *Acta Ethologica*, 7(2), 103–108.
- National Archives. (1998). *Data protection act 1998*. Retrieved from legislation.gov.uk: <http://www.legislation.gov.uk/ukpga/1998/29/contents>
- Nimon, H. I., & Graham, G. J., (2011). The effect of personality on virtual communications in warfare. *Journal of Leadership Studies*, 4(4), 17–28.
- Nulty, D. (2008). The adequacy of response rates to online and paper surveys: what can be done?. *Assessment & Evaluation in Higher Education*, 33(3), 301–314
- O'Hara-Devereaux, M., & Johansen, R. (1994). *Global work: Bridging distance, culture, and time*. Jossey-Bass Publishers: San Francisco.
- O'Daniel. M & Rosenstein, H. A. (2008). Professional communication and team collaboration. In R. G. Hughes (Ed.), *Patient safety and quality: An evidence-based handbook for nurses*, 2. Rockville, MD: Agency for Healthcare Research and Quality.
- Office for National Statistics (2011). *Non-UK born workers – 2011*. Retrieved from [http://www.ons.gov.uk/ons/dcp171776\\_234559.pdf](http://www.ons.gov.uk/ons/dcp171776_234559.pdf)
- Oldmeadow, J. A., & Fiske, S. T. (2010). Social status and the pursuit of positive social identity: Systematic domains of intergroup differentiation and discrimination for high- and low-status groups. *Group Processes & Intergroup Relations*, 13(4), 426–442.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-Analyses. *Psychological Bulletin*, 128(1), 3–72.
- Pallant, J. (2005). *SPSS Survival Guide: A step by step guide to data analysis using SPSS for Windows*. Australia: Allen & Unwin.
- Panteli, N. (2002). Richness, power cues and email text. *Information & Management*, 40(2), 75–86.
- Panteli, N., & Tucker, R. (2009). Power and trust in global virtual teams. *Communications of the ACM*, 52(12), 113–115.
- Parkinson, B., Fischer, A. H., & Manstead, A. S. R. (2005). *Emotions in social relations: Cultural, group, and interpersonal processes*. New York: Psychology Press.

- Paul, D. L., & McDaniel, R. R. (2004). A field study of the effect of interpersonal trust on virtual collaborate relationship performance. *MIS Quarterly*, 28(2), 183–227.
- Peterson, M. F., & Smith, P. B. 1997. Does national culture of ambient temperature explain cross-national differences in role stress? No sweat! *Academy of Management Journal*, 40(4), 930–946.
- Pettigrew, T. F., Tropp, L. R., Wagner, U., & Christ, O. (2011). Recent advances in intergroup contact theory. *International Journal of Intercultural Relations*, 35(2), 271–280.
- Pflug, J. (2011). Contextuality and computer-mediated communication: a cross cultural comparison. *Computers in Human Behavior*, 27, 131–137.
- Piazza, A. & Castellucci, F. (2014). Status in organization and management theory. *Journal of Management*, 40(1), 287–315.
- Plutchik, R. (1997). *The circumplex as a general model of the structure of emotions and personality*. Washington, DC: American Psychological Association.
- Postmes, T., Spears, R., & Lea, M. (1998). Breaching or building social boundaries? Side-effects of computer-mediated communication. *Communication Research*, 25, 689–715.
- Postmes, T., Spears, R., & Lea, M. (2000). The formation of group norms in computer-mediated communication. *Human Communication Research*, 26(3), 341–371.
- Postmes, T., Spears, R., Sakhel, K., & Groot, D. (2001). Social influence in computer mediated communication: The effects of anonymity on group behaviour. *Personality and Social Psychology Bulletin*, 27, 1243–1254.
- Raad, B. D., & Kokkonen, M. (2000) Traits and emotions: A review of their structure and management. *European Journal of Personality*, 14, 477–496.
- Radicati Group (2014). Email Statistics Report, 2014–2018 – Executive Summary. Retrieved from [www.radicati.com](http://www.radicati.com)
- Reicher, S. D., Spears, R., & Haslam, S. A. (2010). The social identity approach in social psychology. In M. S. Wetherell & C. T. Mohanty (Eds.), *Sage identities handbook* (pp.45–62). London: Sage.
- Reicher, S., Spears, R., & Postmes, T. (1995). A social identity model of deindividuation phenomena. *European Review of Social Psychology*, 6, 161–198.
- Reichl, A. J. (1997). Ingroup favouritism and outgroup favouritism in low status minimal groups: Differential responses to status-related and status-unrelated measures. *European Journal of Social Psychology*, 27(6), 617–633.

- Reinke, K., & Premuzic, T. C. (2014). When email use gets out of control: Understanding the relationship between personality and email overload and their impact on burnout and work engagement. *Computers in Human Behavior*, 36, 502–509.
- Restubog, S. L. D., Hornsey, M. J., Bordia, P. and Esposito, S. R. (2008). Effects of psychological contract breach on organizational citizenship behaviour: Insights from the group value model. *Journal of Management Studies*, 45(8), 1377–1400.
- Richardson, R. M. and Smith, S. W. (2007). The influence of high/low-context culture and power distance on choice of communication media: Students' media choice to communicate with Professors in Japan and America. *International Journal of Intercultural Relations*, 31(4), 479–501.
- Richeson, J. A., Dovidio, J. F., Shelton, J. N., & Hebl, M. (2007). Implications of ingroup-outgroup membership for interpersonal perceptions: Faces and emotion. In U. Hess & P. Philippot (Eds.), *Group dynamics and emotional expression* (pp. 7–32). New York: Cambridge University Press.
- Robert, L. P., Jr., Dennis, A. R., & Hung, Y. C. (2009). Individual swift trust and knowledge-based trust in face-to-face and virtual team members. *Journal of Management Information Systems*, 26(2), 241–279.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*, 41: 574–599.
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, 15, 245–259.
- Rodriguez, H., Glahn, T., Rogers, W., Chang, H., Fanjiang, G., & Safran, D. (2006). Evaluating patients' experiences with individual physicians: A randomized trial of mail, Internet and interactive voice response (IVR) telephone administration of surveys. *Medical Care*, 44 (2), 167–174.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35, 651–665.
- Rotter, J. B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist*, 26, 443–452.
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist*, 35, 1–7.

- Roy, S., & Ghose, S. (2005). Internet adoption as a two-stage transition: Converting internet non-users to internet users and to online buyers. *International Journal of Market Research*, 48(3), 321–349.
- Sachdev, I., & Bourhis, R. Y. (1985). Social categorization and power differentials in group relations. *European Journal of Social Psychology*, 15(4), 415–434.
- Samar, R. G., & Mehrani, M. B. (2012). "C u @ d Uni": Analysis of academic emails written by native and non-native English speakers. *The Journal of Teaching Language Skills*, 4(1), 49–72.
- Samar, R. G., Navidinia, H., & Mehrani, M. (2010). Globalization, standardization, and dialect leveling in Iran. *Iranian Journal of Applied Language Studies*, 2(1), 17–30.
- Sanderson, C. A. (2010). *Social psychology*. New Jersey: John Wiley & Sons.
- Sanzo, M. J., Santos, M. L., García, N., & Trespalcios, J. A. (2011). Trust as a moderator of the relationship between organizational learning and marketing capabilities: Evidence from Spanish SMEs. *International Small Business Journal*, 30(6), 700–726.
- Sarker, S., Ahuja, M., Sarker, S., & Kirkeby, S. (2011). The role of communication and trust in global virtual teams: A social network perspective. *Journal of Management Information Systems*, 28(1), 273–309.
- Sassen, S. (2003). *Towards post-national and denationalized citizenship*. New York: Sage.
- Sauder, M., Lynn, F., & Podolny, J. M. (2012). Status: Insights from organizational sociology. *Annual Review of Sociology*, 38, 267–283.
- Schaffer, B. S., & Riordan, C. M. (2003). A review of cross-cultural methodologies for organizational research: A best practices approach. *Organizational Research Methods*, 6(2), 169–215.
- Scherer, K.R. (1988). Criteria for emotion-antecedent appraisal: A review. In Hamilton, V., Bower, G. H., & Frijda, N. (Eds.), *Cognitive perspectives on emotion and motivation* (pp. 89–126).
- Scholte, J. (2005). *Globalization: A critical introduction*. London: Palgrave.
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, 20(3), 344–354.
- Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values: Theoretical and methodological approaches to study of collectivism and individualism. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. Choi, and G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and application* (pp. 85–123). London: Sage.

- Schweitzer, L., & Duxbury, L. (2010). Conceptualizing and measuring the virtuality of teams. *Information Systems Journal*, 20(2), 267–295.
- Science and Technology Facilities Council. (2011, Jan 31). *Saudi visit to the UK furthers science and technology collaboration*. Retrieved from wired-gov.net: <http://www.wired-gov.net/wg/wg-news-1.nsf/0/91196C242AB45C1480257829004561E4?OpenDocument>
- Selfe, C. & Meyer, P., (1991). Testing claims for online conferences. *Written Communication*, 8(2), 163–192.
- Shannon, D., & Myers, L. (2012). Nurse-to-physician communications: Connecting for safety. *Patient Safety and Quality Healthcare*, 9(5):19–26.
- Sharma, D. (2008). Dogmatism and online consumption: Examining the moderating role of trust and value of exchange outcome. *Marketing Management Journal*, 18(1), 63–75.
- Sharpe, J. P., & Desai, S. (2001). The revised Neo Personality Inventory and the MMPI-2 Psychopathology Five in prediction of aggression. *Personality and Individual Differences*, 31, 505–518.
- Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology*, 88, 91–107.
- Shokef, E., & Erez, M. (2006). Global work culture and global identity as a platform for a shared understanding in multicultural teams. In B. Mannix, M. Neale and Y. Chen (Eds.), *National culture and groups: Research on Managing Groups and Teams* (Vol. 9, pp. 325–352). UK: Emerald Group Publishing Limited.
- Shu, T. C. (2005). Comparing mail and Web-based survey distribution methods: Results of surveys to leisure travel retailers. *Journal of Travel Research*, 43 (4), 422–430.
- Silverthorne, C. P. (2005). *Organizational psychology in cross cultural perspective*. New York: New York University Press.
- Sivo, S., Saunders, C., Chang, Q., & Jiang, J. (2006). How Low Should You Go? Low Response Rates and the Validity of Inference in IS Questionnaire Research. *Journal of the Association for Information Systems*, 7 (6), 351–414.
- Smith, C. A., Haynes, K. N., Lazarus, R. S., & Pope, L. K. (1993). In search of the 'hot' cognitions: Attributions, appraisals and their relation to emotion. *Journal of Personality and Social Psychology*, 65, 916–929.
- Smith, C., & Ellsworth, P.C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, 48, 813–838.

- Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego, CA: Academic Press.
- Smith, L., & Abouammoh, A. (2013). *Higher education in Saudi Arabia: Achievements, challenges and opportunities*. Dordrecht: Springer.
- Snow, S. & Jones, E. (2011). Immigration and the National Health Service: Putting history to the forefront. *History & Policy*. Retrieved from <http://www.historyandpolicy.org/papers/policy-paper-118.html#S3>
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp.290–312). San Francisco: Jossey-Bass.
- Spears, R., Postmes, T., Lea, M., & Wolbert, A. (2002). When are net effects gross products? The power of influence and the influence of power in computer-mediated communication. *Journal of Social Issues*, 58(1), 91–107.
- Sproull, L., & Kiesler, S. (1986). Reducing social-context cues: Electronic mail in organizational communication. *Management Science*, 32, 1492–1512.
- Srite, M., & Karahanna, E. (2006). The role of espoused national cultural values in technology acceptance. *MIS Quarterly*, 30(3), 679–704.
- Stephens, K. K., Cowan, R. L., & Houser, M. L. (2011). Organizational norm congruency and interpersonal familiarity in email: Examining messages from two different perspectives. *Journal of Computer Mediated Communication*, 16, 228–249.
- Stephens, K. K., Houser, M. L., & Cowan, R. L. (2009). R u able to meat me: The impacts of students' overly casual email messages to instructors. *Communication Education*, 58, 303–326.
- Stibbe, B. (2004). Send me a message: A step-by-step approach to business and professional writing. *Journal of Written Communication*, 25, 104–123.
- Strong, K., & Weber, J. (1998). The myth of the trusting culture. *Business & Society*, 37(2), 157–183.
- Sutherland, P., & Tan, F. B. (2004). The nature of consumer trust in B2C electronic commerce: A multi-dimensional conceptualization. *Innovations Through Information Technology*, 611–614.
- Tabachnick, B.G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson/Allyn and Bacon.

- Tajfel, H. (1972). Social categorization. English manuscript of 'La catégorisation sociale.' In S. Moscovici (Ed.), *Introduction à la psychologie sociale* (Vol. 1, pp. 272–302). Paris: Larousse.
- Tajfel, H. (Ed.) (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. London: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *The psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall.
- Tan, B. C., Wei, K. K., Watson, R. T., & Walczuch, R. M. (1998). Reducing status effects with computer-mediated communication: Evidence from two distinct national cultures. *Journal of Management Information Systems*, 15(1), 119–141.
- Tan, H. H., & Tan, C. S. F. (2000). Toward a differentiation of trust in supervisor and trust in organization. *Genetic, Social and General Psychology Monographs*, 126(2), 241–60.
- Tanis, M., & Postmes, T. (2008). Cues to identity in online dyads: Effects of interpersonal versus intragroup perceptions on performance. *Group Dynamics: Theory, Research, and Practice*, 12(2), 96–111.
- Taras, V., Steel, P., & Kirkman, B. (2010). Examining the impact of culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95(3), 405–439.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103, 193–210.
- Teijlingen, E. R., & Hundley, V. (2001). *The importance of pilot studies*. Social Research Update, University of Surrey. Retrieved from <http://sru.soc.surrey.ac.uk/SRU35.pdf>
- Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A. H. Tuma & J. Mason (Eds.), *Anxiety and the anxiety disorders* (pp. 681–706). Hillsdale, NJ: Erlbaum.
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behaviour relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22, 776–793.

- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behavior: Self-identity, social identity and group norms. *British Journal of Social Psychology*, 38, 225–244.
- Thurlow, C., Lengel, L., & Tomic, A. (2004). *Computer Mediated Communication: Social Interaction and the Internet*. London: Sage Publication.
- Tidwell, M., & Sias, P. (2005). Personality and information seeking: Understanding how traits influence information-seeking behaviours. *Journal of Business Communication*, 42(1), 51–77.
- Ting-Toomey, S. (1999). *Communicating across cultures*. New York: The Guilford Press.
- Trapmann, S., Hell, B., Hirn, J. & Schuler, H. (2007) Meta-analysis of the relationship between the Big Five and academic success at university. *Journal of Psychology*, 215(2), 132–151. doi: 10.1027/0044–3409.215.2.132.
- Triandis H. C. (1994). *Culture and social behavior*. New York: McGraw-Hill.
- Triandis HC, Carnevale P, Gelfand M, Robert C, Wasti A et al. (2001). Culture, personality and deception. *Int. J. Cross-Cult. Manage*, 1:73–90
- Triandis, H. C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C. (1997). Cross-cultural perspectives on personality. In R. Hogan, J. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 439–464). San Diego, CA: Academic Press.
- Triandis, H. C. (2003). Forty-five years of researching the culture and behavior link: An intellectual autobiography. In D. Tjosvold & K. Leung (Eds.), *Cross-cultural management: Foundations and future* (pp. 11–28). Aldershot, UK; Burlington, VT: Ashgate.
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54(2), 323–338.
- Tsui, A. S., Nifadkar, S. S., & Yi Ou, A. (2007). Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations. *Journal of Management*, 33(3), 426–478.
- Tuleja, E., (2009). *Module 4: Intercultural Communication for Business*. Mason, OH: South-Western, Cengage Learning.
- Turner, J. C. (1981). The experimental social psychology of intergroup behaviour. In J. C. Turner & H. Giles (Eds.), *Intergroup behaviour*. Oxford: Blackwell.



- Turner, J. C. (1999). Some current issues in research on social identity and self-categorization theories. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, content* (pp. 6–34). Oxford: Blackwell.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.
- Uyenne, M. C., & Oti, O. J. (2012). The influence of socio-cultural domains on communication. *An International Multidisciplinary Journal, Ethiopia*, 6(4), 234–247.
- Vernon, P. A., Villani, V. C., Schermer, J. A., & Petrides, K. V. (2008). Phenotypic and genetic associations between the Big Five and trait emotional intelligence. *Twin Research and Human Genetics*, 11, 524–530.
- Vignovic, J. A., & Thompson, L. F. (2010). Computer mediated cross cultural communication: attributing communication errors to the person versus the situation. *Journal of Applied Psychology*, 95, 265–276.
- Wagemakers, J. (2012). Arguing for change under benevolent oppression: Intellectual trends and debates in Saudi Arabia. In R. Meijer & P. Aarts (Eds.), *Saudi Arabia: Between conservatism, accommodation and reform* (pp. 13–32). The Hague: Netherlands Institute of International Relations.
- Waldeck, J., Kearney, P., & Plax, T. (2001). Teacher e-mail message strategies and students' willingness to communicate online. *Journal of Applied Communication Research*, 29(1), 54–70.
- Waldvogel, J. (2007). Greetings and closings in workplace email. *Journal of Computer-Mediated Communication*, 12(2), 122–143.
- Wanberg, C. R., & Kammeyer-Mueller, J. D. (2000). Predictors and outcomes of proactivity in the socialization process. *Journal of Applied Psychology*, 85, 373–385.
- Wang, Z., Walther, J. B., & Hancock, J. T. (2009). Social identification and interpersonal communication in computer-mediated communication: What you do versus who you are in virtual groups. *Human Communication Research*, 35(1), 59–80.
- Washington, M., & Zajac, E. J. (2005). Status evolution and competition: Theory and evidence. *Academy of Management Journal*, 48, 282–296.
- Watson, D., & Clark, L. A. (1992). On traits and temperament: General and specific factors of emotional experience and their relation to the five-factor model. *Journal of Personality*, 60(2), 441–476.

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 47, 1063–1070.
- Watson, J., Lysonski, S., Gillan, T., & Raymore, L. (2002). Cultural values and important possessions: A cross-cultural analysis. *Journal of Business Research*, 55, 923–31.
- Webster, J., & Wong, W. (2008). Comparing traditional and virtual group forms: Identity, communication and trust in naturally occurring project teams. *The International Journal of Human Resource Management*, 19(1), 41–62.
- Westbrook, J., Woods, A., Rob, M., Dunsmuir, W., & Day, R. (2010). Association of interruptions with an increased risk and severity of medication administration errors. *Archives of Internal Medicine*, 170(8), 683–690.
- Wheeler, D. (2000). New media, globalization and Kuwaiti identity. *The Middle East Journal*, 54(3), 432–444.
- White, K. M., Terry, D. J. & Hogg, M. A. (1994). Safer sex behaviour: The role of attitudes, norms, and control factors. *Journal of Applied Social Psychology*, 24, 2164–2192.
- Whitener, E. (2001). Do “high commitment” human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modeling. *Journal of Management*, 27, 515–535. doi: 10.1016/S0149–2063(01)00106–4
- Wilson, E. V. (2005). Persuasive effects of system features in computer-mediated communication. *Journal of Organizational Computing and Electronic Commerce*, 15, 161–184
- Workman, M., Kahnweiler, W., & Bommer, W. (2003). The effects of cognitive style and media richness in commitment to telework and virtual teams. *Journal of Vocational Behavior*, 63, 199–219.
- Wright, S. C. (2009). The next generation of collective action research. *Journal of Social Issues*, 65(4), 859–879.
- Wurtz, E. (2006). Intercultural communication on web sites: From high-context cultures and low-context cultures. *Journal of Computer-Mediated Communication*, 11(1), 274–299.
- Yakovleva, M., Reilly, R., & Werko, R. (2010). Why do we trust? Moving beyond individual to dyadic perceptions. *Journal of Applied Psychology*, 95, 79–91. doi:10.1037/a0017102
- Yamagishi, T., & Yamagishi, M. (1994). Trust and commitment in the United States and Japan. *Motivation and Emotion*, 18, 129–166.

- Yang, J., Wen, Z., Adamic, L. A., Ackerman, M. S., & Lin, C. Y. (2011). Collaborating globally: Culture and organizational computer-mediated communication. *Thirty Second International Conference on Information Systems*, 1–20.
- Yum, Y., & Hara, K. (2006). Computer-mediated relationship development: A cross-cultural comparison. *Journal of Computer-Mediated Communication*, 11, 133–152.
- Yzerbyt, V., Dumont, M., Wigboldus, D., & Gordijn, E. (2003). I feel for us: The impact of categorization and identification on emotions and action tendencies. *British Journal of Social Psychology*, 42(4), 533–549.
- Zeffane, R., Tipu, S., & Ryan, J. C. (2011). Communication, commitment, and trust: Exploring the triad. *The International Journal of Business and Management*, 6(6), 77–87.
- Zellars, K. L., Perrewé, P. L., & Hocharter, W. A. (2000). Burnout in health care: The role of the five factors of personality. *Journal of Applied Social Psychology*, 30(8), 1570–1598.
- Zhou, T. & Lu, Y. (2011). The effects of personality traits on user acceptance of mobile commerce. *International Journal of Human-Computer Interaction*, 27(6), 545–561.